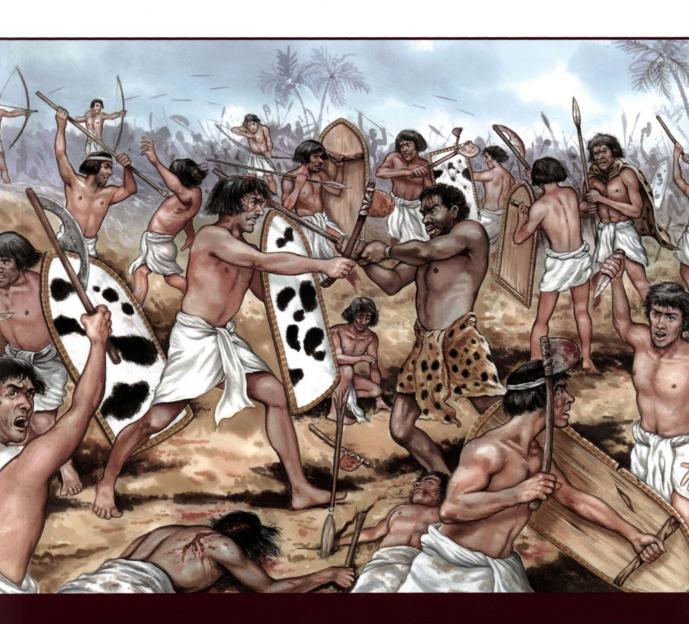


Soldier of the Pharaoh

Middle Kingdom Egypt 2055–1650 BC





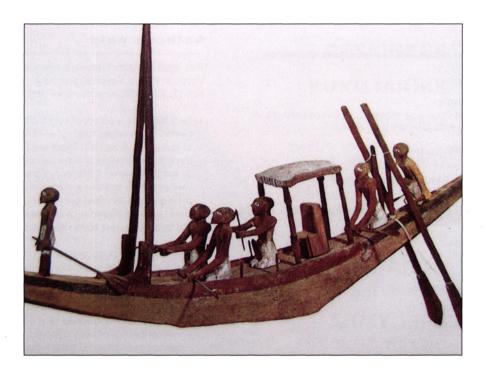
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Soldier of the Pharaoh

Middle Kingdom Egypt 2055-1650 BC



Nic Fields • Illustrated by Peter Bull

First published in Great Britain in 2007 by Osprey Publishing, Midland House, West Way, Botley, Oxford OX2 0PH, UK 443 Park Avenue South, New York, NY 10016, USA E-mail: info@ospreypublishing.com

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A CIP catalogue record for this book is available from the British Library

ISBN: 978 1 84603 106 9

Page layout by Mark Holt Index by Glyn Sutcliffe Typeset in Helvetica Neue and ITC New Baskerville Originated by PDQ Digital Media Solutions Ltd, UK Printed in China through Worldprint

07 08 09 10 11 10 9 8 7 6 5 4 3 2 1

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Editor's note

The author has used the following abbreviations within the text:

b. (c.) - born (circa)

r. (c.) - reigned (circa)

fl. - florit

Author's note

This book contains numerous references to ancient Egyptian tombs. Egyptologists have given these tombs individual identification numbers according to site:

- 1. Beni Hasan is a necropolis on the east bank of the Nile some 23 kilometres north of el-Minya, dating principally to dynasties XI and XII. There are 39 rock-cut tombs at Beni Hasan, several of them belonging to the nomarchs of the Oryx nome. A number of these are decorated with wall-paintings that show military themes. Each tomb is distinguished by the abbreviation BH, denoting the site of Beni Hasan, followed by a one-figure reference indicating the tomb's number within the necropolis (e.g. BH17).
- 2. Meir is a group of decorated rock-cut tombs, in Middle Egypt some 50 kilometres north-west of modern Asyut. The tombs, dating to dynasties VI and XII, belonged to the nomarchs of Cusae and members of their families, including that of Senbi, a nomarch under Amenemhat I. Each tomb is distinguished by the abbreviation B, denoting the site of Meir, followed by a one-figure reference indicating the tomb's number within the necropolis (e.g. B1).
- 3. Western Thebes, next door to modern Luxor, is the site of the mortuary temples and tombs of pharaohs and high officials from the First Intermediate Period (Dynasty XI) to the end of the pharaonic period (332 BC). Each tomb is distinguished by the abbreviation TT, denoting the site of Western Thebes, followed by a one-figure reference indicating the tomb's number within the necropolis (e.g. TT100).

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SOLDIER OF THE PHARAOH: MIDDLE KINGDOM EGYPT 2055–1650 BC

INTRODUCTION

eography has blessed Egypt with the protection of a series of sharply defined natural borders that for many centuries provided the ideal defence against unwelcome guests. Inhospitable deserts east and west demarcate the limits of Egyptian life with the sureness and abruptness of a single line, and the shelving beaches of the Nile Delta prevent passage as effectively as any fortification wall. In the south, though the land is cut by the Nile, a series of six cataracts distributed over nearly 1,400 kilometres of valley makes passage in either direction extremely difficult. Secure within these geographical boundaries, Egypt very early developed as a neat, self-contained, isolated unit. The bountiful Nile, whose annual flooding deposited a fertile layer of silt each year, provided all life's necessities and many of its luxuries – even if there was a regrettable shortage of good indigenous timber for shipbuilding. There was no real need for anyone to venture abroad and, in the words of the Greek historian Herodotos (b. c. 484 BC), Egypt was 'the gift of the river' (2.5.1).

One of two wooden models (Cairo, Egyptian Museum, JE 30986) from the tomb of Mesehti at Asyut. This group shows Egyptian spearmen. Each copper spearhead is attached to the shaft with gut thread, while the shields are painted in black, white and buff to represent cowhide. (AKG-images)

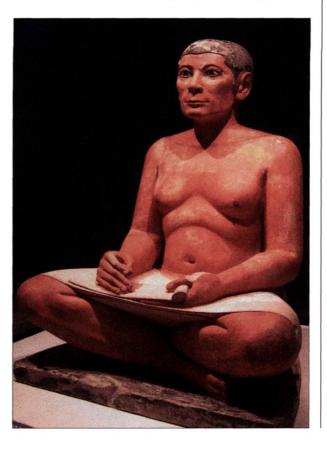


Yet the First Intermediate Period (2181–2055 BC), a time when the Nile valley was divided among petty warring principalities, bore witness to many border settlements falling prey to outsiders. The upshot of this political disunity and instability was, of course, the increasing militarization of Egyptian society, a process reflected in funerary art where the peaceful domestic or agricultural scenes of Old Kingdom art are replaced by portrayals of warlords surrounded by their armed retainers. And so the pharaohs of the Middle Kingdom (2055–1650 BC), though determined to keep Egypt in isolation, were obliged to pay more attention to military affairs and to frontiers than did their predecessors. A sizeable standing army, which included foreign auxiliaries, was maintained, and the two narrow points of entry into the Nile valley, north and south, were firmly plugged.

In its Old Kingdom phase Egypt had pursued little political contact with the outside world. The pharaohs had occasionally dispatched expeditions to the Sinai, Libya or Nubia in search of precious metals and stones, the exotic such as ebony and ivory, and the mundane such as livestock and slaves. At the same time Egyptian merchants had kept up a lively trade with the coastal town of Byblos to import olive oil and cedar wood. Since there was no apparent need for a permanent standing army, apart from a royal retinue, armies of young men were periodically conscripted on a relatively ad hoc basis for a variety of labour-intensive purposes, from quarrying and trading expeditions, to military campaigns and the policing of civil disturbances. Everything was to change when Egypt was drawn into the international arena and had to defend its own gates.

That the Middle Kingdom heralded a huge development of military organization and hierarchy is clearly reflected in the emergence of such specific titles as 'chief of the leaders of the town militia', 'soldier of the town militia', 'crew of the ruler', 'chief of the leaders of the dog patrols' and 'scribe of the army'. The last was a duty of great importance. In an age where literacy levels were extremely low - the extent of literacy has been tentatively estimated at less than 1 per cent of the population - reports and orders could be passed in writing and only be accessible to those senior officials who could either read or had access to their own scribes. Remaining textual sources, such as the so-called Semna Dispatches, also indicate that the Middle Kingdom army had a sizeable 'tail', an administrative infrastructure manned by state bureaucrats (scribal and managerial) who could handle all of the routine chores of military housekeeping with competence. By the time of Senusret III (r. 1874–1855 BC), with the centralization of power and the creation of fortresses with their permanent garrisons, the army, supported by its administrative body, was a bottomless pit of expenditure, consuming the surplus production that had earlier fuelled the peaceful building programme of the pyramids.

Model (Paris, musée du Louvre, E 3023) of a seated scribe, Dynasty V. Some of the hieratic texts used in the education of scribes consisted of descriptions of the comfort and prestige enjoyed by scribes, in contrast to the rigours and hazards of army life. (Esther Carré)



CHRONOLOGY

Modern Egyptologists' chronologies of ancient Egypt combine three basic approaches. First there are 'relative' dating methods, such as stratigraphic excavation or the 'sequence dating' of artefacts. Second there are the 'absolute' chronologies, based on calendrical and astronomical records obtained from ancient texts such as 'king-lists' and stelai. Finally there are 'radiometric' methods (principally radiocarbon dating and thermoluminescence), by means of which particular types of artefacts or organic remains can be assigned dates in terms of the measurement of radioactive decay or accumulation.

The ancient Egyptians themselves dated important political and religious events in terms of the years since the accession of each current pharaoh, referred to as the regnal year. Dates were therefore recorded in the following standard format: 'day three in the second month of *peret* [spring] in the third year of Menkheperra [Thutmose III]'.

The division of the pharaonic period into dynasties was a chronological system introduced by Manetho (fl. 300 BC), a Hellenized Egyptian priest, when he composed his history of Egypt, the Aegyptiaca. Unfortunately this major work has survived only in the form of extracts used by much later writers, from the Jewish historian T. Flavius Josephus (b. c. AD 37) to the Byzantine chronicler George Syncellus (fl. AD 800). The list of 30 dynasties began with the semi-mythical Menes (fl. 3000 BC), who was the first to unite the 'Two Lands' of Upper Egypt (southern Nile) and Lower Egypt (the Delta), and continued through to Alexander the Great (d. 323 BC).

Manetho was evidently able to consult both Egyptian sources and also Greek annals. In general his dynasties appear to correspond to the groupings of rulers suggested by various pharaonic king-lists, mainly recorded on the walls of tombs and temples. In modern chronologies the dynasties are usually grouped into major periods known as 'kingdoms' (when one king ruled unchallenged throughout the Two Lands), and 'intermediate periods' (when the kingship was often divided). The distinction between one dynasty and another occasionally seems rather arbitrary, but two of the most important factors appear to have been changes in royal kinship links and the location of the capital.



Stonemasons' and carpenters' tools (Edinburgh, Royal Museum), including stone mould, wooden mallet, copper tongs, axe blades, knives and chisels, an adze and an awl. The introduction of more complex weapons evolved simultaneously with the introduction of more specialized tools for stone and wood working. (Esther Carré)

Dynastic and historical peri		
Predynastic Period	5500-3100 BC	
Early Dynastic Period	3100-2686 BC	
Old Kingdom	2686-2181 BC	
First Intermediate Period	2181-2055 BC	
Middle Kingdom	2055-1650 BC	
Second Intermediate Period	1650-1550 BC	
New Kingdom	1550-1069 BC	
Third Intermediate Period	1069–664 BC	
Late Period	664-332 BC	
Ptolemaic Period	332-30 BC	
Roman Period	30 BC-AD 395	

Dynasty XI (All Egypt)	2055-1985 BC
Mentuhotep II (NeBHepetra)	2055-2004 BC
Mentuhotep III (Sankhkara)	2004-1992 BC
Mentuhotep IV (Nebtawyra)	1992–1985 BC
Dynasty XII	1985–1795 BC
Amenemhat I (Sehetepibra)	1985-1955 BC
Senusret I (Kheperkara)	1965-1920 BC
Amenemhat II (Nubkaura)	1922-1878 BC
Senusret II (Khakheperra)	1880-1874 BC
Senusret III (Khakaura)	1874-1855 BC
Amenemhat III (Nimaatra)	1855-1808 BC
Amenemhat IV (Maakherura)	1808-1799 BC
Sobekneferu (Sobekkara) – female pharaoh	1799-1795 BC
Dynasty XIII	1795-after 1650 BC
Around 70 pharaohs, of which the five more freque	ently attested are listed below
Hor (Awibra)	
Khendjer (Userkara)	
Sobekhotep III (Sekhemraseewadjtawy)	
Neferhotep I (Khasekhemra)	
Sobekhotep IV (Khaneferra)	c.1725 BC
Dynasty XIV	1750-1650 BC
Series of minor rulers who were undoubtedly conte	emporary with Dynasty XIII

There are some overlaps between the reigns of Dynasty XII pharaohs, when there appear to have been 'co-regencies' during which father and son ruled simultaneously. The spelling of ancient Egyptian personal names is a continual source of difficulty. Thus the pharaohs cited here as 'Senusret' may be found elsewhere as 'Senwosret', or in the Greek form 'Sesostris'. Spellings chosen in this publication are as far as possible consistent with the transliteration of the original Egyptian.

All dates prior to the accession of the Kushite pharaoh Taharqo in 690 BC should be taken as approximate. The term 'pharaoh', which is widely used by modern writers to refer to an Egyptian king, is the Greek form of the ancient Egyptian phrase *per-aa* ('great house'). This term was originally used to refer to the royal palace rather than the king, only being

Painted wooden model (Turin, Museo Egizio), c. 1850 BC, depicting the preparation of bread. Here men and women grind grain, knead dough and shape and bake round, flat cakes of bread. Soldiers' daily rations, as for civilians, included large amounts of freshly baked bread. (AKG-images)



used for the king himself from the New Kingdom onwards. For sake of convenience, however, the term 'pharaoh' will be used throughout.

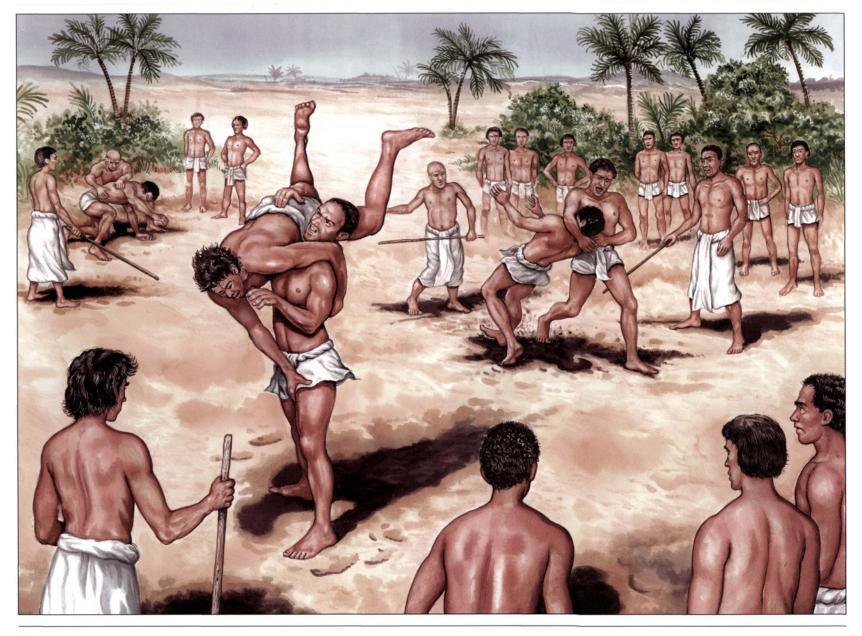
SERVING THE PHARAOH

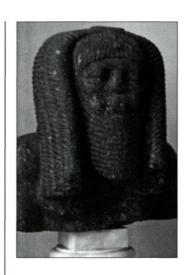
The Egyptian soldier spent very little of his time actually fighting pitched battles. Indeed, the army to which he belonged provided a ready labour force as much as a war machine. Its military role did not preclude it from being put to other uses when unskilled manpower was required, and the armed expeditions sent to procure valuable commodities were no different to the 'conventional' army according to surviving Middle Kingdom textual sources. The manpower and organization of the army was also put to good use for more peaceful purposes, such as civil engineering projects at home. A scene from the tomb of Djehutihotep at el-Bersha (Tomb 2) shows the transportation of a colossal statue pulled by 172 men in rows of fours. The accompanying inscription tells how the second row is made up of soldiers. Likewise, an inscription of Mentuhotep IV (r. 1992–1985 BC) records how his army was put to practical and peaceful

A: RECRUITMENT

Conscripted from the peasantry, youths would be trained and formed into militia units to supplement the hereditary warriors. For the most part then, the Egyptian soldier was a peasant who was required to serve in the army when the pharaoh demanded service. As such he was not a full-time professional soldier of the realm, but a part-time member of what was known as a 'town militia' raised and maintained by the local nome. Military service began in the late teens, a peasant conscript serving perhaps for a year or two before being allowed to return home to his village. However, he would be liable to be called to arms at any time for expeditions or campaigns.

On induction into the army, a youth would be sent from his village to the nearby barracks for training. On arrival he would be registered by a scribe and would then receive an obligatory haircut, closely cropped hair being the military fashion. Drill and instruction in the use of weapons would be an essential part of the on-going process of turning our free-thinking individual into a useful soldier. This basic training also included an energetic fitness programme, and this scene shows recruits taking part in a wrestling competition. The object is to throw your opponent to the ground, and the contest continues without intervals until one man has thrown his opponent a number of agreed times, perhaps three, without first suffering the same fate himself. Touching the ground with the back, shoulders or hips constitutes a fall.





Grey granite statuette (Museo Nazionale Romano, Palazzo Altemps, Ludovisi Collection 8607) of Amenemhat III. The son of Senusret III, his reign (1855–1808 BC) represents the apogee of Dynasty XII, with the military achievements of his predecessors allowing him to exploit the economic resources of Retennu and Nubia. (Author's collection)

Dhows on the Nile near Luxor.
The Nile is the longest river in the world, stretching 6,741km from East Africa to the Mediterranean. It is the most important element of the geography of both ancient and modern Egypt because of its water and the fertile lands of the seasonal flood-plains. (Esther Carré)

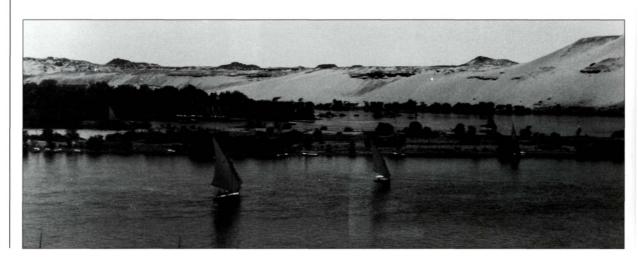
work: 10,000 men from Upper Egypt helped with the transportation of a large block of stone from the *bekhen*-stone (siltstone or greywacke) quarries at the Wadi Hammamat. The stone, destined to become the body of the pharaoh's sarcophagus, was transported successfully and Mentuhotep records how his 'soldiers descended without a loss, not a man perished, or a troop was missing' (quoted in Partridge 2002: 177). These are words that make the quarrying expedition sound like a military campaign even though the soldiers were, on this occasion, not facing a hostile enemy.

Despite the adoption of a more vigorous foreign policy by the Dynasty XII pharaohs, particularly in Nubia, it is evident that the army continued to be used for civil engineering projects. Amenemhat III (r. 1855–1808 BC) built two pyramids, one at Dahshur and another at Hawara. It is conceivable that Amenemhat followed the example of Mentuhotep IV and employed a large detachment of his soldiers to assist.

RECRUITMENT AND TRAINING

The basis of civil and military organization was the provinces or nomes. These originated as autonomous tribes, each under its own chieftain, scattered in agricultural settlements along the Nile. Over a period of time these nomes grouped together and evolved into the kingdoms of Upper and Lower Egypt. The southern king Menes, the first legendary pharaoh of Egypt, is credited with uniting the Two Lands into one kingdom around 3000 BC, but the memory of the initial division was preserved in the double crown of the pharaohs. Likewise the nome-structure remained, with 22 from Upper Egypt and 20 from Lower Egypt, each one serving as a local administrative area under the supervision of its own nomarch (*hatyaa*, 'hereditary-noble').

There were two classes of soldier drawn from the general reserve of young men eligible for conscription known as *djamu*: first, those eligible for military service (*hewenu-nefru*, 'youthful recruit'); second, hereditary professional soldiers (*ahautyu*, 'warriors'). The latter were perhaps a survival from the predynastic organization of the nome, and associated with this class are those who viewed soldiering as a full-time career and thus yolunteered.



The raising and training of recruits was the responsibility of the 'overseer of recruits' (imy-er hewenu-nefru), a function usually performed by the nomarch. At the start of the Middle Kingdom Amenembat I (r. 1985-1955 BC) had to rely on his nomarchs to raise a force to campaign in Nubia and throughout the Middle Kingdom period the army essentially remained a provisional one raised from native militia. Thus Thuthotep, a nomarch serving Senusret, records how he had mustered the 'youthful recruits of the west of the Hare nome', those 'of the east of the Hare nome', as well as the 'youths of the warriors of the Hare nome' (British Museum EA 1147). The 'youths of the warriors' probably refers to the mobilization of the next generation of ahautyu eligible for service.

Promising soldier material was conscripted from amongst the peasantry, hardy youths in their late teens earmarked to be trained and formed into militia units to supplement the *ahautyu*. The vast majority of Egypt's peasants lived in mud brick (adobe) houses, in villages or hamlets set back from the cultivated land that fringed the Nile. They earned their livelihood by working the fertile fields, which mostly belonged to the pharaoh, or the temples near their ancestral settlements.

Yet the militia system meant the peasantry had an obligation to do occasional military service. Thus a peasant conscript may have had a limited term of initial service, perhaps a year or two, serving in his local unit (niwt, 'town militia'). In contrast the hereditary warrior, on reaching maturity, replaced his father and served throughout his active life as a professional soldier. The term 'warrior' is derived from the ancient Egyptian verb 'to live', and in a very real sense designated a soldier dependent upon the pharaoh. It was these men who made up the standing army, and the importance of these professionals to the ruling pharaoh was clearly reflected by the fact that they were referred to in official documents as the 'crew of the ruler'.

Nomarchs were required to supply contingents for national efforts when requested by the pharaoh, and normally led them on campaign as their commander. In the reign of Senusret I (1965–1920 BC), Amenemhat of the Oryx nome 'sailed southward with a number, four hundred, of all the choicest of my troops' (Newberry 1893: 25) and accompanied the pharaoh's campaign deep into Nubia. He took 'six hundred of all the bravest of the Oryx nome' on a subsequent campaign led by the pharaoh's vizier, also named Senusret (Newberry 1893: 26). Nome contingents obviously varied in size according to the population of the nome concerned. The Oryx nome was situated in the middle of Upper Egypt, and larger numbers would probably be mustered from areas such as Memphis, Thebes and the Delta where the cultivated lands were more extensive. Each year, between June and September, the Nile valley flooded and work in the fields ceased until the first crops could be planted in October or November. So this was the time when most manpower was



The Narmer Palette (Cairo, Egyptian Museum, JE 32169), showing the legendary pharaoh thought to be the first to rule the Two Lands. The low relief on this side depicts him wearing the white crown of the kings of Upper Egypt, smiting his enemy with a pear-shaped mace. (AKG-images)

Wall Painting from the Dynasty
XII tomb of Baqt III at Beni
Hasan (BH15) depicting caning
and other forms of corporal
punishment. Discipline in the
Egyptian army, like any other
state army in history, was strict.
For minor offences, the culprit
was beaten across the back
by one man. (AKG-images/
François Guénet)



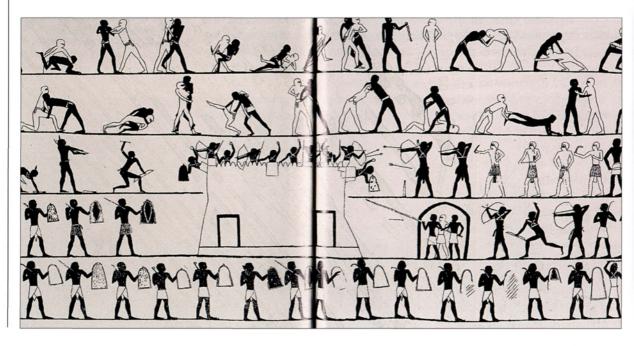
available for conscription. Many of those levied were not likely to have had prior military experience.

Once the recruit reached the barracks, his name was listed and his head was shaved. It is possible that the peasant conscript was subject to some form of initiation ritual common in military life throughout the centuries and in all cultures with an organized body of men under arms, although any direct proof of this is lacking. It is also likely that the soldiers swore a formal oath of allegiance to the ruling pharaoh.

Physical fitness was of great importance because most of the time soldiers would have marched to battle, carrying the bulk of their rations with them, along with all their personal equipment. This would include their principal weapons, battleaxe and shield, bow and arrows.

New recruits, therefore, would have experienced a harsh combination of physical exertion and exercise together with the physical

Scene of siege warfare during the civil wars of the late First Intermediate Period, tomb of Khety, a nomarch of the Oryx nome, at Beni Hasan (BH17). The transfer of power to local rulers like Khety led to the rise of private armies. (Reproduced from P. E. Newberry, Beni Hasan I)





Wall painting from Baqt III's tomb depicting wrestlers. As part of the recruit training programme, contact sports such as boxing and wrestling not only built up a young peasant-conscript's muscle and strength, but also enhanced his fighting spirit. (AKG-images/François Guénet)

and verbal abuse common to all well-established military organizations. A scene from the tomb of Khety, an early Dynasty XI nomarch of the Oryx nome, at Beni Hasan (BH17) show youths undertaking what appears to be weight training to build up their upper bodies, using weights made of bags filled with sand as part of a general, vigorous fitness regime. It would have been a disaster if the soldiers arrived on the field of battle too exhausted to fight. Other scenes, uncanny in their resemblance to the sketches of martial arts and self-defence techniques found in today's unarmed combat manuals, indicate that wrestling was part of this training programme. Extant scenes on the walls of the rockcut tombs at Beni Hasan, especially those belonging to the Oryx nome nomarchs, specify the sort of weapon training undertaken by the recruits. In one scene we see a group of men throwing knives at a wooden target. Although tomb art does not record it, we can presume that archery and the use of the battleaxe were also parts of the general training regime.

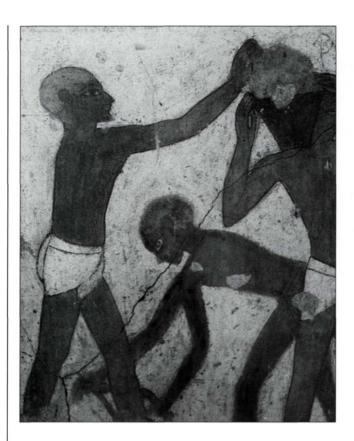
SOLDIERS AND EQUIPMENT

After his period of initial training was complete, the peasant conscript would be absorbed into his local militia unit. This practical policy allowed the hard-earned experience of veterans to be passed on to greenhorns and training probably continued as the new members drilled and exercised with the more experienced men of the 'town militia'.

All Egyptian units in this period were exclusively made up of foot soldiers, of which there were two distinct types. Tactics were firmly based on the use of dense formations of close-order archers (*megau*, 'shooters') and open-order hand-to-hand fighters (*nakhtu-aa*, 'strong-of-arm'), perhaps split 50:50.

Dress

Wearing neither body armour nor head protection and even barefoot, these soldiers are invariably depicted in funerary art wearing the same bleached linen kilt as that worn by civilian labourers and field-workers.



Wall painting, tomb of the Dynasty XVIII vizier Rekhmira, Thebes (TT100). These workmen, who are collecting Nile silt to make bricks, wear little more than the short kilt common to civilian and soldier alike. A triangular piece of linen, the garment was wrapped around like a loincloth. (Esther Carré)

Linen is made from the fibres of the flax plant, which was grown extensively in ancient Egypt. The extremely fine threads were woven into cloth to produce a gauze-like material. The kilts themselves were made from a simple triangle of linen some 50 centimetres wide. The base of the triangle was placed around the back of the wearer and the two corners tied in front of the body. The third corner was pulled between the legs and under the tied corners and then allowed to hang down in front of the groin. At Deir el-Bahari the mass grave of some 60 Nubian archers who served in the armies of Mentuhotep II (2055-2004 BC), contained many textiles, including linen kilts, some with the names of the owners, such as Sobekhotep and Senusret, painted on them in black ink.

Over his kilt a soldier could wear the socalled naval kilt. This was a leather garment that protected the linen kilt from wear and tear. Believed to have originated in Nubia, 'naval kilts' were made from a single panel of soft hide. This was webbed methodically using a sharp implement so that it resembled a net, although a square patch of leather was

left intact at the seat. Being webbed meant the garment was more flexible, and it was fastened around the waist by a thin strip of leather that was incised with holes. Middle Kingdom soldiers did not have body armour or helmets.

ARCHERS

The bow was a crucial element in Egyptian weaponry as it provided a long-range assault weapon that dealt out death at a distance and backed up hand-to-hand fighters. A scene from the tomb of Baqt III at Beni Hasan (BH15) depicts two archers shooting, one behind the other, with the front one in a kneeling position and the rear one standing. A good body of archers, deployed in close order several ranks deep, could maintain a withering barrage of arrows against the enemy, causing gaps in their ranks and eroding the morale of the opponents.

Bows

Archers are most commonly depicted using a self-bow. The self-bow, which could vary in length from 1 to 2 metres, was commonly made of native Egyptian acacia. To prevent splitting, the wooden stave was often strengthened at certain points by binding it round tightly with cord. It was tapered towards each end and notched to allow the fixing of the bowstring.

Bowstrings could be crafted from pieces of twisted animal gut. Strips of plaited linen, which proved more efficient than the former, were also employed. Unlike composite bows, self-bows were never left permanently strung. Bowstrings were usually fitted just before use by looping the line over the end of the upright limb, which was then bent by the weight of the archer's body so that the string could be affixed to the foot. Alternatively, a kneeling archer would grip the bow between his knees and stretch the bowstring vertically across the pliable stave.

The Middle Kingdom self-bow probably had an effective range of between 50 and 60 metres.

Arrows

Ancient Egyptian arrows too were made of reed, fletched with feathers, and tipped with flint, bone, hardwood (Egyptian ebony) or copper points. The advantage of copper lay in the fact that it was hard enough to produce a sharp penetrating point, but soft enough to buckle against bone. Copper therefore provided a more efficient warhead than wood and bone. Arrowheads could be barbed or triangular. Barbed arrows would be prevented from being drawn from the wound by the weight of the shaft, and in fact caused more injury when being extracted than when entering the body. The wider, triangular heads, on the other hand, were designed to cut flesh.

The arrowhead was secured to the shaft by a tang and the reed head then securely bound with fine linen thread or sinew and thickly covered with black mastic. The tang had to be very long in proportion to the arrowhead so that side pressure did not exert too much leverage and split the shaft. Yet the advantages of reed were obvious; reeds were light, grew straight naturally and were easily obtained. Those arrows that have been studied were made from a reed that has a hard stem, similar in appearance to bamboo.

Fletching was made from pieces cut from birds' feathers, neatly trimmed, glued and lashed to the end of the arrow shaft with linen thread.



The other wooden model (Cairo, Egyptian Museum, JE 30969) from the tomb of Mesehti at Asyut (see page 4). This group shows Nubian archers. They carry self-bows in one hand, and their arrows in the other. It is possible that the two models served to represent Mesehti's private army. (AKG-images)





Without flight feathers an arrow will wobble in flight or even rotate end over end in the air, but with flight feathers it remains steady, and the arrow always flies headfirst. Usually three rounded flights were fitted to each arrow, symmetrically disposed around the shaft. When not in use, arrows were grasped in the hand when marching as quivers were seldom employed.

Ancillary equipment

Although weapons were issued from state armouries, as shown in scenes from the tomb of Senbi at Meir (B1), archers were responsible for the care and maintenance of their equipment. They are likely to have carried spare bowstrings since these often snap on application and need to be swiftly replaced. Spares may have been worn around the head, though archers probably carried personalized kitbags. A surviving example of a kitbag not only contained spare bowstrings, but also a bracer, worn to protect the left wrist (the bow being held in the left hand) from the whip of the bowstring after the arrow had been fired, and pebbles for the sharpening or polishing of arrowheads.

The contents of the kitbag also included lumps of malachite and grease together with a small pot. Malachite is an important ore of copper, occasionally procured from Nubia, and it was probably used by archers to protect their eyes from the reflection of the sun. Lumps of malachite were also ground up and mixed with grease and water to form

ABOVE LEFT Self-bow and reed arrows, as depicted in a hunting scene from the tomb of Khnumhotep at Beni Hasan (BH3). The design of the Egyptian self-bow has a peculiar type of limb arch. It retains a rounded form, while the extremities are joined, producing a circumflex wooden stave. (AKG-images)

ABOVE Self-bow (Florence, Museo Archeologico, 2679), Second Intermediate Period, resting on the cab floor of a chariot found at Thebes.

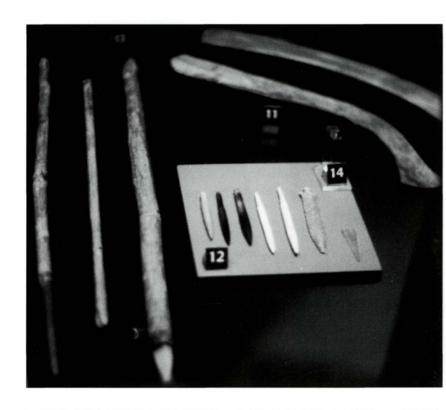
Occasionally the wooden stave of the bow was strengthened to prevent it splitting under stress. The bow here has been partly bound with palm-fibre cord. (Author's collection)

B: ARCHER

The invention of the bow led to the mechanization of human aggressiveness, enabling man to fire missiles over greater distances at ranges unrivalled until the invention of firearms. It comes as no great surprise, therefore, to find that the principal offensive weapon of the Egyptians was the bow. Alongside hand-to-hand fighters, archers form the other main element of the Middle Kingdom army, and the firepower, delivered before and during a charge, from massed archers was formidable. This archer carries his self-bow in one hand, the left, and a bunch of arrows in the other. The bow, some 1.5 metres in length, is made up of an acacia wood stave, narrowing at either end and strung with twisted gut. The stave has been strengthened at certain points by firmly binding it with cords of palm fibre. Arrowheads are of copper and are tanged rather than socketed. The reed shafts are some 75 centimetres long and bound with sinew thread below the nock and head to prevent splitting. The kilted archer also wears a bracer on his left wrist. This protective piece of leather shields the archer's wrist from the whip of the bowstring after the arrow has been fired. Note it is ornamented with cowrie shells, which serve as small prophylactic charms. Around his head he has tied a couple of spare bowstrings.



Reed arrow shafts and flint and bone/ivory arrowheads (Edinburgh, Royal Museum). Arrows used in hunting were rapidly made and tended to inflict large, shallow wounds, whereas these, for use in warfare, could be fired from a long distance and were capable of inflicting deep wounds. (Esther Carré)



a thick, blue-green paste, which was then applied under the archer's eyes with the fingers. The malachite paste also had the added property of acting as a natural disinfectant, and the mineral is a common ingredient in Egyptian ophthalmologic recipes.

HAND-TO-HAND FIGHTERS

Soldiers armed and equipped for hand-to-hand combat carried a long, roughly rectangular shield, which could sometimes be large enough to cover the bearer completely, and wielded a spear or, more commonly, a battleaxe. The use of the latter requires a degree of free movement on the part of individuals, and a certain amount of space for the fighters to keep out of one another's way.

Battleaxes

This shock weapon usually consisted of a D-shaped or a rounded copper axe-head lashed to a wooden handle by rawhide thongs, threaded through perforations in the metal and wrapped around projecting lugs. The use of wet rawhide thongs, which shrank and tightened as they slowly dried, produced an extremely strong fixing. Blades could be easily removed from damaged or broken hafts, which could then be replaced. This would not have required specialist skills and could be undertaken by the soldier in the field. Hafts were usually made of willow, a native wood that was suitably strong.

Another type of battleaxe was the splayed axe. This kind had a longer blade with concave sides narrowing down to a slightly curved cutting edge. Again blades were simply lashed to a wooden handle using rawhide thongs passing through holes at the base of the blade and around the haft. Yet another type, the epsilon axe, was also particularly common in the Middle Kingdom. So-called by Egyptologists because of its resemblance to the Greek letter ϵ , it had a wide convex cutting edge and three tangs, each perforated with one or more holes, by which it was attached to the haft using copper pins or rivets.

For all these types of battleaxe the haft was often slightly curved, and the end with which it was grasped was wider than the central part of the shaft. This shape enabled the soldier to swing without the weapon slipping from his hand. The haft was also part-wrapped with leather or linen to produce an efficient grip, especially important if it became wet with sweat (and blood). When not in use the battleaxe was secured against the body. Often this was easily done by a soldier simply tucking the weapon into the back of his kilt.

The Bronze Age, to which the Middle Kingdom belongs, is the period when bronze tools and weapons were widely used. The archaeological record indicates that the use of bronze increased during Dynasty XII, when early bronze items were imported ready-made from Retennu (the Egyptian term for Syria-Palestine) rather than home produced. However, copper was still used extensively by Egyptian armourers to craft the business ends of shock weapons, and the distinction between copper and bronze objects is sometimes so subtle it can only be verified by scientific analysis.

Spears

Spears originated from a dagger-like blade with a long tang that may have been mounted on a shaft rather than held close to the body. The spear was used as a short (held) or mid-range (thrown) weapon. It came in various lengths, but models from the First Intermediate Period show soldiers carrying spears that are the height of a man. The shaft was made of reed or wood and tipped with a copper blade. The majority of spearheads were designed with a flat or voluted tang with round or leaf-shaped (splaying) blades. The latter type ensured that a serious stabbing wound could be inflicted, but, most importantly, that the spear could be recovered quickly, ready for further use. Incredible as it may seem, it is difficult to extract a narrow blade easily and rapidly from a victim.

The Egyptians used voluted tangs curved at the rear to prevent the shaft from splitting as it was thrust. The widest point of the shaft would be split down the centre and the tang slotted into the wood. Its volute was turned outwards, and the blade was then lashed into place with sinew or gut thread to create a firmer bond. It was not until the New Kingdom onwards that spearheads were made with a socket into which the shaft was fitted.



Three battleaxes, a dagger and two throwsticks (Florence, Museo Archeologico, 6971-3, 7677, 7683-4). Although the copper blades of these battleaxes vary in design (D-shaped, splayed, rounded) they are all mounted on short, wooden hafts and were used for hacking at very close quarters. (Author's collection)



Two splayed axes, an epsilon axe, and a D-shaped axe (Turin, Museo Egizio). Again, despite the copper blades varying in design, the wooden hafts have been similarly curved, allowing the wielder to obtain a proficient swing and to preventing the moving weapon from slipping from the hand. (AKG-images)

Daggers

For close-quarter work and delivering the coup de grâce to one's fallen enemy, the weapon used was a dagger. The blade of this shock weapon was short and double-edged, and was designed primarily for stabbing, rather than slashing, so that it created a deep, narrow wound in the body of an opponent.

The earliest copper daggers are made from a single sheet of flat metal, whilst later examples are made with a clearly defined mid-ridge to the blade, which gives additional strength. Handles were of wood, bone or ivory, and scabbards of wood or leather were used to protect the blades when not in use. The earliest examples are small enough to be carried tucked into the waistbands of the soldiers' kilts. Otherwise they could be carried on a band around the arm.

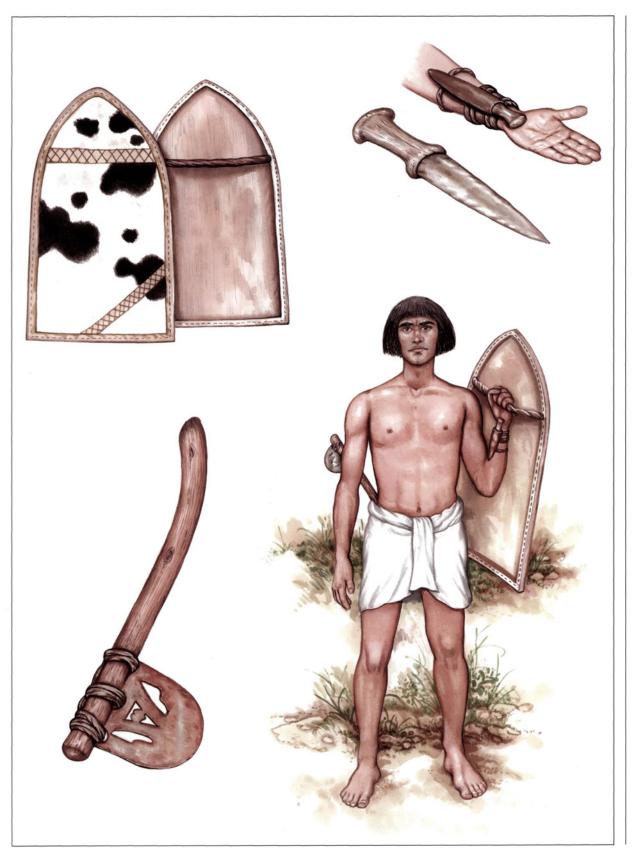
Some daggers have rounded pommels on the end of the handles. These may appear decorative, but have the practical purpose of helping

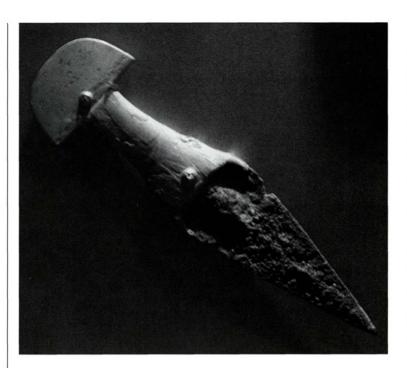
A: HAND-TO-HAND FIGHTER

Ancient missile weapons fired more rapidly than any firearms available before the late 19th century but had lower impact, so shields could provide sufficient protection. Wearing no body armour or head protection, this soldier carries the cowhide-covered, wooden-framed shield widely used by hand-to-hand fighters to defend themselves from arrows. Typically 1.5 metres high, the shield is slightly broader at the base than the top where it finishes in a curve. A small handgrip is attached to the inside of the shield, which is made of painted rawhide. The soldier's sole item of clothing is a kilt of bleached linen.

The preferred shock weapon of the Middle Kingdom army is the copper-bladed battleaxe, ideally suited to hacking at a foe's head and upper body. The example carried by the soldier here has a D-shaped head lashed onto a wooden haft by rawhide thongs, threaded through perforations in the copper and wrapped around projecting lugs. The haft, crafted from willow wood, is slightly curved. This shape allows the soldier to obtain a proficient swing during close-quarter work, and, more importantly, it prevents the weapon from slipping from his hand. The haft could also be part-wrapped with strips of linen or leather, which made for an efficient grip. When it is not carried in the hand, the soldier tucks the haft of the weapon into the belt of his kilt.

His other personal weapon is the arm dagger, which is housed in a leather sheath attached to the inner side of his left forearm by a leather loop. For quick extraction with the right hand, the flat wooden hilt rests against the inside of his left wrist. Although the Egyptians have mastered the art of smelting and are crafting blades from copper, this particular dagger is flint-bladed. Flint blades have a much sharper and longer-lasting edge than the supposedly superior copper versions.





Beautifully formed dagger (Edinburgh, Royal Museum), c.3200 BC, with silver triangular blade and gilded ivory hilt. Daggers, the first swords, symbolized an individual's character and status. The true sword would be the result of advances in metallurgy accomplished during the Second Intermediate Period. (Esther Carré)

the wielder of the weapon keep a secure grip on it and prevent it from slipping from his hand. The weight of a pommel, usually cast in one piece with the blade and the handle of the dagger, also produced a better-balanced weapon. The addition of a pommel marks the transition from a knife to a dagger. Daggers continued as one of the most popular weapons of the Bronze Age.

Shields

Shields are depicted in funerary art and in many tomb models of the period. Shields were large, usually between 1 and 1.5 metres in height, and probably fairly heavy, as they were made of tough cowhide stretched over a wooden frame and stitched together. Their solid construction was

sufficient to protect the user in battle from incoming arrows and other missiles, as well as from close-quarter weapons such as spears and battleaxes. Shields might be painted with black spots, or with mottled brown and black patches on a white or buff background, which may have imitated cow hide.

The characteristic shape of the Egyptian shield, which usually tapered towards the top to a curve or a pointed edge something like a Gothic window, was ideally suited to allow soldiers deployed in close-order to form a continuous wall of shields. The flat base allowed it to be planted firmly on the ground to form a temporary palisade to protect both hand-to-hand fighters and archers, the latter being able to fire over the heads of their fighting comrades.

A handgrip, either of wood or plaited rawhide was attached to the wooden framework. Rawhide thongs could also be attached to the handgrip for occasions (such as sieges) when the shield needed to be slung over the shoulder and across the back, leaving both hands free.

RETAINERS

A nomarch, who acted as the commander of the forces of his nome, would usually maintain a body of personal retainers (*shemsu*, 'followers'). In the funerary art of the period, such as those scenes found in the tomb of Djehutihotep at el-Bersha (Tomb 2) and that of Senbi at Meir (BI), these are usually depicted armed with large shields and hefty battleaxes. They accompanied the nomarch as he carried out his official duties and probably formed his personal bodyguard in battle. The pharaoh also maintained *shemsu*, and an inner retinue of highly trusted officials known as 'sole-companions' to whom might be entrusted any important commission, military or otherwise.

AUXILIARIES

Many light-skinned warriors with black wavy hair and thin, pointed beards are depicted in Middle Kingdom funerary art. In the Dynasty XII tomb of Khnumhotep at Beni Hasan (BH3), for instance, they are shown visiting the nomarch with their kith and kin in order to trade. Known to the Egyptians by such vague terms as *heryw-sh* ('sand-dwellers') or *mentjiu* ('wild ones'), they wear either a characteristic 'coat of many colours', a highly decorated, patterned, sleeveless woollen garment, or a patterned, wrap-around kilt. They carry a variety of weapons including self-bows, slings, javelins, large clubs, small battleaxes, and throwsticks.

The precise purpose of the throwstick, which was essentially a curved wooden blade, has been a matter of debate amongst scholars, some suggesting that it was used as a hunting weapon in the same fashion as a boomerang. However, the Egyptian version was certainly not designed to return to the thrower, and it would be wrong to assume that the throwstick in general was without military function. A useful ethnological parallel, perhaps, are the Ingessana of the Blue Nile region who use a number of types of throwstick in hunting and warfare (Spring 1993: 77).

As foreign soldiers in Egyptian service the auxiliaries would have used their native weapons, which were developed in a different environment and for a different style of fighting. Auxiliaries were organized in separate units under their own native leaders, and were tactically independent. Since there was no shortage of manpower in Egypt, the foreign soldiers were employed as specialists. They were recruited from the nomadic bands of bedouin on the eastern frontier of Egypt, who may have been valued more on account of their expertise in scouting, skirmishing and ambushes, than on account of weaponry alone. Certainly their knowledge of the desert and their ability to move easily across arduous terrain made them valuable military scouts.

Likewise the Medjay, a pastoral and cattle-rearing people from the deserts east of the Nile in Lower Nubia, were favoured as foreign soldier-scouts. Most were armed with a self-bow, but other weapons carried could include clubs, daggers and javelins. Shields, if used, were simple oval sections of hide stretched over a wooden frame.

Nubians in general were highly regarded as fighters, and already in Dynasty VI the recruitment of an Egyptian army bears eloquent testimony to the value placed on them as auxiliary troops. When Weni,



Throwstick (Edinburgh, Royal Museum, 1914.70) made of wood. Artistic representation during the Middle Kingdom period reveals that the throwstick was not only a weapon of the hunt but also employed during battle. To improve throwing performance, the weapon was commonly given a grip of leather or linen. (Esther Carré)

the governor of Upper Egypt, was commissioned by Pepi I (r. 2321–2287 BC) to command a punitive expedition against the bedouin, he levied troops not only from Upper and Lower Egypt, but also 'Nubians of Irtjet, Nubians of Medja, Nubians of Yam, Nubians of Wawat and Nubians of Kaw' (G. Steindorff, et al., *Urkunden des aegyptischen Altertums*, I 101). Even during the First Intermediate Period, when Egyptian influence over Nubia weakened perceptibly, Nubians still sought employment in Egyptian provincial forces. As we have seen, warring nomarchs such as Mesehti of Asyut were by no means averse to attracting Nubians into their small private armies.

ON WATER

The style of warfare within the Nile valley differed considerably from that later encountered in Retennu under the New Kingdom pharaohs. The army of the Middle Kingdom period lacked chariots and horses but, as befitted the narrow Nile valley, it was water-based with the riverine fleet as its core. Hence the Egyptians were able to make only a quick, one-punch effort – an incursion rather than a regular invasion – beyond their borders. The only record of any invasion of Retennu in the Middle Kingdom is that written on the memorial stele erected on behalf of Khusobek at Abydos. Khusobek accompanied Senusret III to Retennu but it appears to have been only a minor campaign, possibly motivated by the prospect of plunder, and not a serious attempt to seize and then hold any territory.

D: TACTICS

The Nile constituted an easily negotiated transit conduit for military operations. When, for instance, Herodotos visited Egypt it took four days to travel from Thebes to Elephantine. The distance is some 221 kilometres. Therefore a Nile boat at that time (c.450 BC) would travel approximately 55 kilometres per day. In contrast, the Greek historian's journey south of Elephantine lasted more than twice that time on the river, a rapid march on foot achieving just under 27km a day (Herodotos 2.29). Success in any war relies heavily upon generalship, but it is also a result of 'who gets there the fastest with the mostest'.

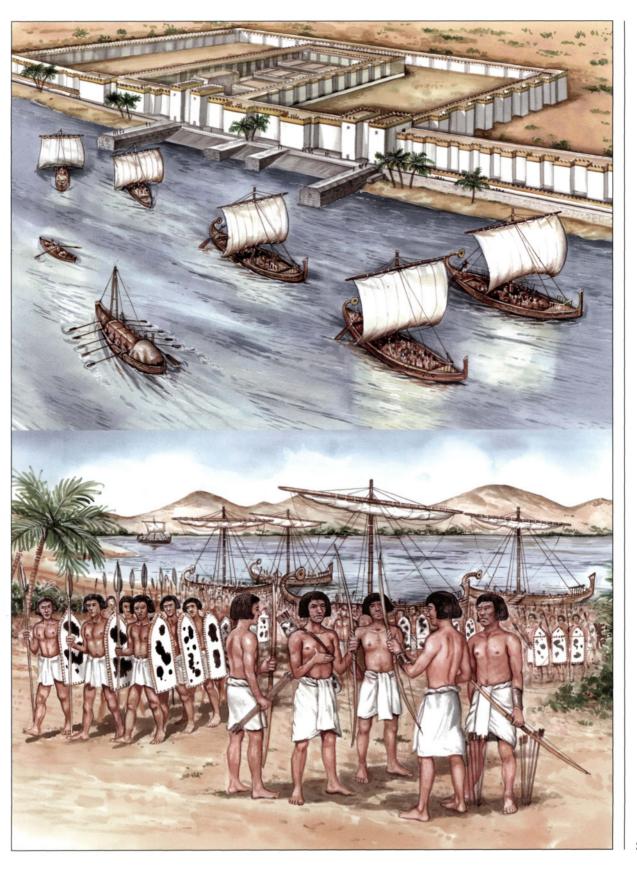
Water

The only useful figure of troops that a 'warship' could contain is embedded in an early Dynasty XII story, the *Tale of the Shipwrecked Sailor*, and in this case the vessel was operating in the Red Sea. 'One hundred and twenty sailors were aboard from the best of Egypt' (Papyrus St Petersburg 1115.28), and even if this number is exaggerated, we are assuming it refers to a rowing crew who also served as soldiers. Similarly, the wooden model soldiers from the early Dynasty XI tomb of Mesehti comprise a body of spearmen and one of archers, both organized in two blocks of 40 men, arrayed ten ranks deep, which may represent a basic unit of organization. In all probability, however, an assorted array of commercial and private boats was pressed into service when necessary.

Taking advantage of the following wind, these Nile boats, which albeit diverse, have in common a large rectangular sail and one or two steering-oars, are transporting soldiers and their equipment upstream from the fortress at Buhen (seen here in the background) deeper into riverine Nubia. Despite the heavy presence of the Egyptian army, the Nubians, with their attachment to warfare and mobility, continue with their raiding lifestyle.

Land

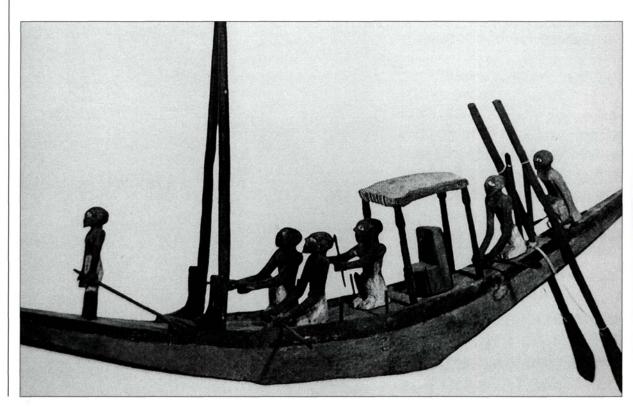
While a Nile-based military force, the Middle Kingdom army still fought its battles on dry land. In this scene the Buhen expeditionary force has disembarked from its flotilla of transports and is now preparing for a surprise attack against a Nubian settlement. The object of this *chevauchée* involves only partly the booty and chattels to be gained; of far greater importance is the deterrent value of wiping out a whole village, destroying its economic base, and mutilating or impaling the survivors. In the process, of course, the army will be blooded.



The sailing and construction of boats can be traced back to the papyrus skiffs, made of several bundles of reeds lashed together, of the Predynastic Period. Many-oared boats were commonly depicted in red paint on the buff-coloured pottery of the Naqada II Period (3500–3100 BC), while the carved relief decoration on a Naqada II ivory knife handle from Gebel el-Arak in Upper Egypt (and now held in the Louvre) is the earliest Egyptian depiction of an amphibious operation. It shows shaven-headed warriors, armed with maces and staves, arriving in boats with high, straight prows and sterns, usually interpreted as Mesopotamian-inspired vessels. Early riverine boats seem to have been primarily used for the rapid transportation of troops and equipment up and down the Nile. Djer, a Dynasty I pharaoh, used boats in an attack on Nubian settlements as early as 2900 BC and the warriors depicted on the Gebel el-Arak knife handle are fighting with local tribesmen.

A major consideration regarding the amphibious aspect of Egyptian warfare is that the prevailing wind in the Nile valley blows upstream, while the current flows northwards. Thus the Nile made life very easy for sailors as well as soldiers travelling this way. If one was travelling southwards sails could be used to propel boats, making it possible to sail from the Mediterranean more or less continuously almost 900 kilometres to the First Cataract at Aswan. On the other hand those heading north, albeit against the wind and under oar, enjoyed the benefit of the current. Before the Nile flood was stopped by the completion of the Aswan High Dam in 1971, the Nile flowed at an average speed of 1 knot (1 nautical mile, or 1.8529km, per hour) at low water in spring and increased its current speed to around 4 knots at high flood in the autumn. For this reason the hieroglyph for 'travelling north' (downstream), even in the case of

Wooden model (Paris, musée du Louvre, E 12021) of a Nile boat with its bipod mast erected for sailing upstream, Dynasty V. By the Old Kingdom, Egypt had become a fully fledged nautical power and every feature that was to characterize Egyptian shipbuilding until the end of the New Kingdom was on its way to full development. (Esther Carré)



overland travel, consisted of a boat with its mast unstepped and stowed away, while that for 'travelling south' (upstream) shows a boat with billowing sails. Similarly, a kneeling man holding a bow followed by a boat sign illustrates the Egyptian term for 'expedition'.

With the Nile running through the country and beyond, transportation of large bodies of men and their equipment was both fast and effective. The journey, for instance, from Memphis in the north, to Thebes (today's Cairo to Luxor) took around 13 days to complete, assuming all the travelling was done during the hours of daylight and the wind was sufficient to fill the sails of the boats for the journey. Travelling northwards from Thebes to Memphis relied mainly on the speed of flow of the river and this could vary dramatically at different times of the year, but various accounts, both ancient and modern, indicate a journey length of around 20 days. Travelling at night would have shortened these journey times, but some parts of the river have hazards such as sand and mud banks. During the daytime lookouts were always posted in the bows of the ships to look out for these river obstacles as well as for the herds of hippopotami, once in abundance, which could be a serious danger to shipping.

Soldiers were not only transported on water but fought water-borne operations as well. In his Autobiography, written on the walls of his funerary chapel at Abydos, Weni, the governor of Upper Egypt under Pepi I describes how he employed boats to land his military contingents:

When it was said that the back-turners [effeminates] because of something were among these foreigners in Antelope-Nose, I crossed over in transports [nmiw, 'travelling-boats'] with these troops. I made a landing at the rear of the heights of the mountain range on the north of the land of the bedouin [herywsh, 'sand-dwellers']. While a full half of his army was (still) on the road, I arrived, I caught them all, and every back-turner among them was slain. (Pritchard 1969: 228)



Painted linen shroud (Turin, Museo Egizio) from an early Dynasty XI tomb at Gebelein. This fragment of the shroud bears a depiction of a Nile boat under oar. The mast has obviously been stowed for rowing downstream, while the boat's deckhouse, positioned amidships, probably displayed large cowhide shields. (AKG-images)



Wooden model (Paris, musée du Louvre, E 1193-4) of Nile boat under oar, from Asyut. Lookouts were placed at the bow of the boat, to watch out for other craft on the river, for sand banks and even herds of hippopotami. Note the talismanic eye painted on the prow. (AKG-images)

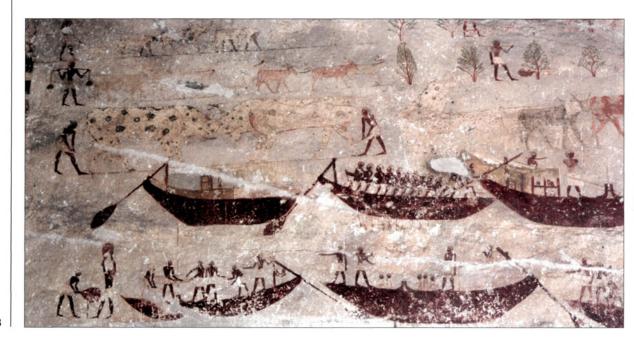
Wall painting from Baqt III's tomb showing a scene with merchant vessels on the Nile. Boats capable of carrying large bodies of men and their equipment, such as these, could easily be pressed into service when necessary.

(AKG-images/François Guénet)

The obscure place he calls 'Antelope-Nose' may refer to a mountain range that protrudes into the Mediterranean, but we cannot be sure. However, we can be sure of the success of the operation. In this battle Weni traps the bedouin between a land-based force and a contingent of soldiers who were ferried to battle on boats. Of the army he says:

The army returned safe and sound, it had ravaged and flattened the land of the bedouin, it had sacked their strongholds, it had cut down their figs and vines, it had burnt down their buildings, slain their troops by the tens of thousand, and carried off many of their warriors as captives. (Pritchard 1969: 228)

Despite the inflated figures – Weni also claims the pharaoh's army was 'of many tens of thousands of conscripts from all of Upper Egypt' – this amphibious incursion was highly organized and highly successful.





Five times Weni was sent to quell the bedouin and most of the campaigns at this time, as they would be during the entire Middle Kingdom, are little more than border disputes, with the Egyptians periodically asserting their authority over the troublesome and marauding tribes that operated on the fringes of civilization. Short, sharp and occasionally brutal military actions centred on the Nile waterway kept the borders secure. In the tomb of Khnumhotep at Beni Hasan (BH3) we read how this nomarch accompanied Amenemhat I, erstwhile vizier of Mentuhotep IV and founder of Dynasty XII, on an expedition in which 'twenty boats of cedar' (Newberry 1893: 36) were engaged in expelling a certain foe from Egypt. The inscription is fragmentary and the exact enemy is uncertain. It could have been bedouin in the north or Nubians in the south or even another claimant to the throne, as there appears to have been a dispute over the succession at this time.

Nomadic bedouin, as depicted in a wall painting from the tomb of Khnumhotep at Beni Hasan (BH3). They wear either a highly decorated, patterned, sleeveless woollen garment, or a patterned, wrap-around kilt, and carry an assortment of weapons including self-bows, spears and throwsticks. The second register shows Egyptians. (AKG-images)

Whatever the cause, the nature of the pharaoh's operation is certainly unmistakable, it was amphibious, but only in so far as his soldiers were ferried to battle by boat. Likewise the Nubian campaign led by his son and successor Senusret I. Amenemhat, the nomarch of the Oryx nome mentioned earlier, records in his tomb at Beni Hasan (BH2) how he 'followed my Lord when he sailed southwards to overthrow his enemies...there was no losses among my soldiers' (Newberry 1893: 25). On this particular occasion, however, there does not seem to have been any major battle and the Nubians no doubt beat a hasty and sensible retreat. For the Middle Kingdom pharaohs, wishing to project power

Boat building

The boats of the Middle Kingdom were usually made of wood obtained either locally (acacia, sycamore) or from Retennu (pine, cypress, cedar). They had a distinctive round-bottomed, spoon-shaped hull, and the bow was practically horizontal but the stern rose quite steeply. They were beamy and drew little water. They were usually provided with large steering-oars with flat projecting tillers, a collapsible pole mast located close to the mid-line of the vessel, and a rectangular sail made of linen. Booms were held aloft by lifts, which were generally secured somewhere on the mast below the upper yard. Oars would also have been used for propulsion when there was insufficient breeze to fill the sails. The oarsmen were provided with individual seats, and the oars were worked against tholepins to which they were attached by means of a grommet. Deckhouses are found on nearly all the boats of the period. They are situated at the stern of the boat immediately forward of the of the steering-oar posts.

From classical antiquity onwards shipwrights employed the keel, which serves both as the foundation from which the boat's planks are built up and, more importantly, as a source of longitudinal stiffening. There is no evidence that Egyptian shipwrights ever adopted the keel, though they could use heavy beams to strengthen the hull, certainly at deck level and perhaps in the bilge. The planks were set carvel fashion, that is to say edge-to-edge, and never overlapped as in clinker-built boats.

Six boats were found buried alongside the pyramid of Senusret III at Dahshur. All are round bottomed, broad in beam and have gently curving sheers. All are of similar shape and size and their individual dimensions vary from 9.2 to 10.2 metres long, 2.24 to 2.28 metres wide at maximum beam, and 0.84 to 0.9 metres from bottom plank to sheer line. All display the same, traditional 'shell-first', edge-to-edge technique of boat building. Mortise-and-tenon joints are used to maintain the shape of the spoon-shaped hull, and the hull is tied together with through-beams, the earliest attestation of this important structural device. Perplexingly the hull has neither frames nor structural lashings, although this lack of internal framing seems to conform to Herodotos' detailed description of fifth-century Egyptian boat building:

The Nile boats used for carrying freight are built of acacia wood – the acacia resembles in form the lotus of Cyrene and, exudes gum. They cut short planks, about two cubits [c. 1m] long, from this tree, and the method of construction is to lay them together like bricks and through-fasten them with long spikes set close together, and then, when the hull is complete, to lay the deckbeams across the top. The boats have no ribs, and are bound (paktoūn) from inside with papyrus. They are given a single steering-oar, which is driven down through the keel; the masts are of acacia wood, the sails of papyrus. (Herodotos 2.96.1-3)

Yet, without at least some lashing, it is still unclear what would have held the Dahshur boats together in the water. Tenons, flat tongues of wood designed to fit into edge cuttings called mortises, served mainly to maintain the boat's shape, while lashings actually held the planks together. While lashed construction was used in many cultures, the Egyptians were apparently unique in lashing their boats laterally through mortises that did not penetrate the external sides of the hull planking. Instead they cut V-shaped mortises through which transverse rope lashings secured the strakes and keel-planks.



beyond the frontiers of Egypt, boats provided the only true means for moving their armies quickly and efficiently.

1:40-scale replica of a Nile boat. (Edinburgh, Royal Museum,

ON LAND

The time taken to move an army both within Egypt and beyond the border was critical to the success of any military campaign. Movement of troops is slow. Used as a means of rapid transportation, Nile boats usually carried the army until the disembarkation, at which point the soldiers then usually fought on dry land, preferably flat. The soldiers were easy to supply because the boats would have also carried the necessary war material, food and the like. The intention was to reach a suitable place of battle in order to beat the enemy before he was able to prevail.

Battle

The army, deployed out of bowshot, would be roughly divided into left and right wings and centre. There could be a rearguard or reserve. The commander, the pharaoh himself if present, the vizier or one of the nomarchs if not, would be positioned in the centre of the main battle line with his retainers about him. Command of the reserve, if formed, was entrusted to a second-in-command with another body of retainers. It is reasonable to assume that the centre of the battle line would be composed of hand-to-hand fighters loosely formed but several ranks deep, for that is what fighting with shock weapons such as the battleaxe tends to amount to in the absence of tight, disciplined formations. These fighting soldiers would be supported by close-order archers drawn up in more linear formations. Those who relied on mobility, such as foreign auxiliaries, attempted to harass the

1:40-scale replica of a Nile boat. (Edinburgh, Royal Museum, T 1981.74) Life-sized this 30-oared vessel would have been some 25 metres in length. With individual benches for the oarsmen, any extra fighting personnel (and their equipment) would have squeezed themselves on deck somehow. (Esther Carré)

enemy from a distance while protecting their own side. They would thus form the flanks of the battle array, and could also be detached to act as an advance guard and perhaps also rear and flank screens if required.

A commander would order his archers to initiate the battle, their role being to maintain a continuous volume of missiles as the hand-to-hand fighters advanced to make contact with the enemy. The task of these troops was to engage and overwhelm the enemy at close quarters.

The accuracy of individual archers may not have been too important, for if a barrage of arrows was fired in a parabolic trajectory, its effect on an enemy could be devastating. If the enemy were bunched together, many of the missiles would find a target as they fell to earth.

There is certainly no evidence for the deployment of mixed formations, probably because the Egyptians considered that it would strengthen neither shooters nor fighters and might even weaken both. By keeping the two basic soldier types in separate mass formations, the hand-to-hand fighters were given sufficient density to be effective and the archers could keep clear of the confused mêlée, so that they could keep shooting at the enemy throughout the battle. Naturally this tactic of providing covering fire involved the risk of the archers hitting their own hand-to-hand fighters.

The Middle Kingdom fortresses display a sound understanding of the principles of crossfire and enfilade, so it is assumed that these principles were put into effect in open battle also, thereby reducing the chances of casualties through fire. Archer formations were probably deployed between bodies of hand-to-hand fighters, or as a screen to the front so as to soften up enemy formations. For example, in the tomb of Amenemhat at Beni Hasan (BH2), archers are shown standing before a fortress, their arrows planted upright in the ground, in readiness to fire up at the battlements. They are protected by shield-bearers, and in their turn protect the soldiers who are assaulting the fortress. Other archers are shown flanked by hand-to-hand fighters.

Death in battle

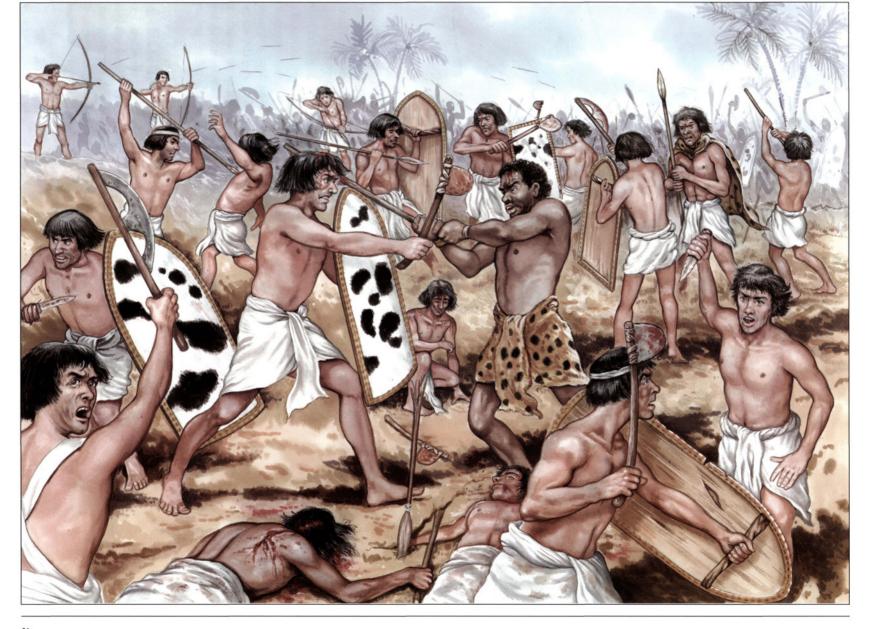
The Theban prince Mentuhotep II once again united the Two Lands after overthrowing the royal dynasty at Herakleopolis (Dynasty X) and conquering the northern nomes. His mortuary temple at Deir el-Bahri contained the burial chamber of a unique group of mummies, at least

E: BATTLE

As the two armies lumber towards each other, the archers keep up a steady rate of fire, which will become more intense as the distance between the combatants decreases and the archers are surer of finding a target. At this range the arrows do not need to be aimed at specific individual targets. In effect, released in volleys, arrows fired up and above the enemy are more than sufficient, as enough of them will find targets as they fall to earth.

The main stage of the pitched battle is the all-out assault, made when the two armies are almost on top of each other. This final thrust needs to be at speed and the hand-to-hand fighters will surge forward under a cloud of arrows to meet the enemy in a head-on smash. There is a distinct advantage in standing ground and letting the enemy attack, as their soldiers will arrive out of breath and lose any formation and grouping. On the other hand, being confronted by an attack of weapon-wielding soldiers, running and yelling, can be very intimidating and, unless units are reasonably trained and disciplined, they can turn tail and flee. The decision centres upon the relative merits of momentum and cohesion. Is it better to risk the loss of cohesion but gain momentum by charging, or reverse these goals by standing to receive the attack?

Given the nasty realities of one-on-one combat, battles at close quarters do not last long. Such encounters are brutal and personal in the extreme, and even a battle-hardened professional will have difficulty in coping, let alone the peasant conscript, who may be more a civilian than a soldier. Armed hand-to-hand fighters press forward in their units and fight to the death. Their battlefields are scenes of furious fighting and carnage that usually consume not more than an hour or two. Every man is pushed to the limits of his physical and psychological endurance – and then it is over, not to be repeated for a year or more.



A warrior's tale In the reign of Senusret III, Khusobek (alternatively Sebek-Khu) served as one of the royal retainers and began his military career in command of a unit of six men. He was subsequently promoted to 'retainer of the ruler' (shemsu en hega) and given command of 60 men on an expedition to Nubia 'to overthrow the wretched Kush'. His bravery on that occasion won him promotion to 'instructor of retainers' (sehedj shemsu) in command of a unit of 100 men. While Nubia proved troublesome in the south, all was not quiet on the northern frontier. Khusobek fought at Sekmem (Shechem), a town captured during a campaign in Retennu, as commander of the rearguard. The course of the battle is not recorded exactly but the rearguard was eventually brought into action. Khusobek managed to capture a prisoner in the mêlée and was singled out for this individual exploit and personally rewarded by the pharaoh with a 'staff of electrum, a bow and a dagger wrought with electrum, together with his [the prisoner's] weapons' (quoted in Shaw 1991: 46). This incident, along with the other details, was recorded on a stele placed at the sacred site of Abydos in memory of the recently deceased Khusobek, probably by a member of his family and in the style of an Autobiography. Such funerary tributes provide crucial evidence of this period and deepen our understanding of the soldiers of the Middle Kingdom.

60 soldiers who are believed to have died in combat during the civil war that brought about the reunification of Egypt. That Mentuhotep chose to honour these soldiers in this way indicates the great significance of this particular battle.

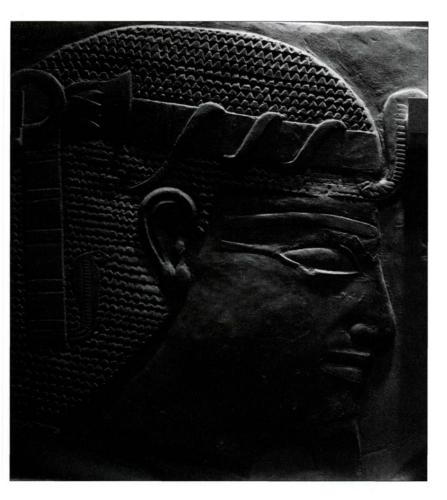
It is estimated that the average height of the men was 1.69 metres. It is reckoned the bodies are Nubian soldiers, for their dark hair, which was dressed into tight curls and covered in some type of oil, resembled that of the Nubian peoples depicted on Egyptian monuments. In addition, the remains of bracers still attached to the wrists identify all these Nubians as archers. Some of the warriors bore old wounds that had healed, especially on the skull and face, so it is likely that at least some of them were battle-hardened veterans. Their age was between 30 and 40 years, with three men showing signs of greying hair or baldness.

It appears that the Nubians were not killed in close-quarter combat and carrion birds had pecked at the eyes and flesh of at least six of the corpses indicating that they had been left on the battlefield for some time before being collected for burial. Arrowheads were also found among the warriors' hair. Some of the soldiers had small head wounds, probably caused by the arrowheads, although the larger gashes found on the skulls were likely to have been caused by missiles that had been fired from above the warriors' heads during battle. This could have occurred during an attack on a well-defended town with high defensive walls, or as the result of arrows having been fired from ground level high into the air, which then fell almost straight down on their target.

Other arrow wounds include one to the upper arm of a warrior, while a wooden arrow tip was discovered between the rib cartilages and the skin of another. In one warrior an arrow had entered the left side of the torso between the ribs at the inferior angle of the scapula, its velocity sufficient to send it directly across the chest cavity where it became fixed in both the left lung and the heart. Its tip had protruded from the man's chest, but the impact of his body hitting the ground broke the end off the arrow. The amount of bleeding from the wound shows that death was not instantaneous.

One arrow was found in the auxiliary space below a small round hole at the base of the neck of yet another warrior, with clear evidence of a haemorrhage around the wound. The arrow was shown to have crossed the bottom of the left eye socket and penetrated the back of the nose and the head. Other men were found to have wounds where the arrow tips remained in situ, and at least ten of these victims had been wounded or killed by ebony-tipped reed arrows. One arrow tip was found in the right scapula, and it was clear that it had hit the warrior while he lay wounded on the ground.

Egyptian arrows were propelled with limited force, and victims were more likely to die of blood loss or of infection from the arrow wounds than from the impact itself. By and large forensic examination has shown that the warriors had suffered a high percentage of head wounds and broken noses, some injuries having been inflicted post mortem. Most of these secondary wounds were to the left side of the head, as if the men had been held by their hair and then hit with a blunt instrument swung by the right hand of their assailant. In the Tale of Sinuhe a near-contemporary example of this appears in narrative form in the description of Sinuhe's duel with the champion of Retennu: 'When



Stone wall-carving (Edinburgh, Royal Museum), depicting Mentuhotep II (r. 2055–2004 BC), from his mortuary temple at Deir el-Bahri. As prince of Thebes, after a long period of internal struggles, he defeated the Herakleopolitan dynasty to become the founding ruler of the Middle Kingdom. (Esther Carré)

he charged at me, I shot him, my arrow fixed into his neck. He screamed and fell on his nose; I dispatched him with his battleaxe' (Papyrus Berlin 10499, 3022 B 138-140.)

Note that in this instance the neck wound was not fatal, the victim being finally finished off by Sinuhe with the victim's own battleaxe. In the well-preserved funerary art from Beni Hasan, we find images of the dead or dying struck by arrows, with the most frequent injuries illustrated being neck wounds. The secondary wounds on the bodies of Mentuhotep's Nubian archers indicate that the victors were making sure their enemies were truly dead. Bloodstains were common, and it is clear that many of the soldiers lay bleeding to death on the battlefield.

MEDICAL TREATMENT

While written evidence regarding the treatment of battle wounds is limited, medical papyri provide references to symptoms and cures connected to wounds sustained in combat. The head, the thorax and the upper part of the sternum absorbed the brunt of this violence, the head, in particular, being the chief target of blows from battleaxes.

The Edwin Smith surgical papyrus, which dates back to the New Kingdom period (1550–1069 BC), is an Eyptian medical treatise containing

various descriptions of treatments. Open wounds seem to have been treated by the application of fresh meat on the first day, followed by a preparation of honey, fat and plant fibre until the wound had finally healed. Fresh meat has astringent and homeostatic properties, which impart a soothing effect. Honey, for its part, possesses antiseptic properties that modify the environment in which germs develop, thus offering partial protection against the infection of wounds. Fat was converted by heating into soap valued for its soothing qualities, and parts of various trees and plants were recommended for their astringent action. One recipe, for instance, calls for a decoction of willow leaves to be applied to an infected wound to the chest. It is now known, of course, that willow contains salicylic acid, the basis of aspirin, a drug which quickly alleviates pain and inflammation.

Diodoros Siculus (fl. c.40 BC), who is well known for the description of ancient Egypt included in his first book of Bibliotheca Historia, a history of the world from the very earliest times until Caesar's conquest of Gaul, describes Egyptian physicians as civil servants who were fed and housed by the state. 'On their military campaigns and their

journeys in the country', writes Diodoros, 'the Egyptians all receive treatment without the payment of any private fee' (1.82).

Egyptian physicians attached to the armies would most likely have sutured gaping wounds with thread and bandaged others with linen strips. The Egyptians preferred linen to wool, which was considered impure, and its tight weave helped protect wounds from infection by holding dressings in place. Infected wounds would have been treated with medicinal herbs and spices, with milk, oil, wine and water often serving as vehicles to give the active substances the desired volume or consistency. Plants such as thyme and cinnamon were used as antiseptics

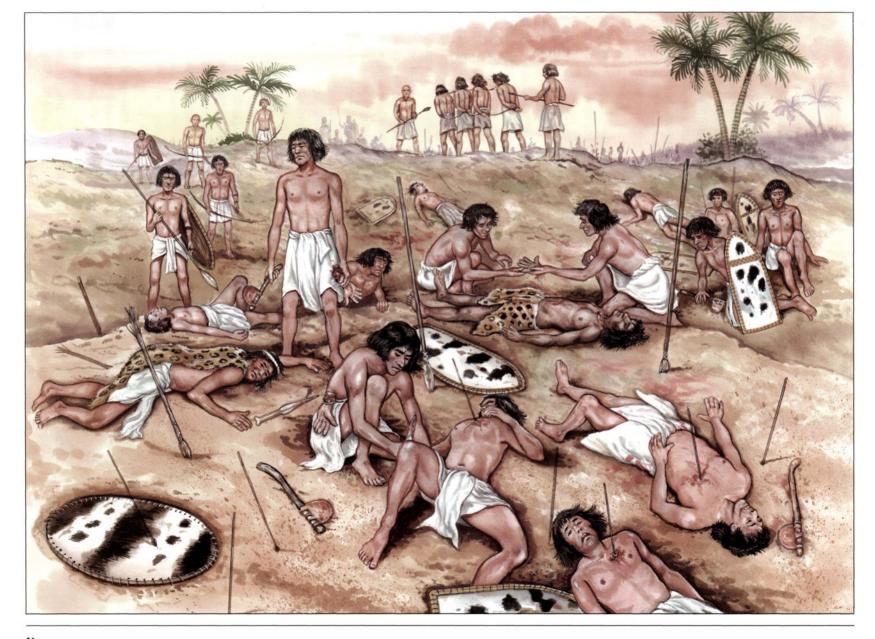


Painted wooden model of a box containing beer bottles with pointed caps. To the ancient Egyptians, soldiers and civilians alike, beer was regarded as a food rather than simply a drink. Chiefly made from barley, Egyptian beer was a thick, soupy, nourishing liquid. (AKG-images/Erich Lessing)

F: AFTERMATH OF BATTLE

A soldier's trade is a harsh one, which includes not merely the risk of death or maiming but also involves the death of one's comrades. Yet the reward of success (and survival) is plunder, and victorious troops will strip the bodies of their slain enemies, taking their equipment and weapons. In addition to the spoils of battle individuals are sometimes singled out for their battlefield prowess and extraordinary deeds, and can be rewarded by their officers or even personally by the pharaoh.

An Egyptian soldier's performance on the field of battle is measured by the human remains he recovers. After slaying an enemy soldier he will sever various parts of the body, usually the right hand but ears and phallus can be taken also. These grisly remains are then attached to a rope-coil that he wears across the chest, and in this manner they serve as trophies of honour and glory. This practice obviously opens up the distinct possibility that soldiers might mutilate their own dead and wounded. To avoid this, only the body parts of enemies with a lighter or darker complexion are officially accepted as tokens of valour.



– the essential oil of thyme, for instance, has been shown to be 20 times stronger than phenol, the standard modern antiseptic – while aloe was applied to burns and inflammation. Opium poppy and mandrake root were also taken to alleviate pain. Opium poppy is today the source of morphine and heroin, while mandrake, in modern anaesthesia, was the main anaesthetic before the development of ether.

Apart from puncture wounds, namely those caused by arrows, spears and axes, there were wounds involving blows to the body that were violent enough to break bones. The army physicians could cope with most of these injuries well, treating fractures with manipulation, wooden splints and swabs of linen. On the other hand, they would have been unable to treat wounds that caused internal injuries, which were not readily apparent.

Routine risks

In addition to war wounds, army physicians would also have been expected to deal with any number of day-to-day complaints and ailments, which the soldiers would have experienced either on campaign or in garrison. The medical papyri indicate that dysentery and water pollution were both problematic issues. Soldiers would also have been plagued by lice, gnats, mosquitoes and sand flies and, if they were stationed on the rim of the desert (known as *deshret*, 'red land'), would have had to cope with scavenging dogs, jackals and venomous snakes. Of the latter there were evidently 38 different types in Egypt alone, all of which were considered to be divine manifestations (Papyrus Brooklyn 1-38). Travel on the river was also a risky business, with crocodiles along the length of the Nile and hippopotami also present, which even today in central Africa cause more deaths than any other wild animal.

Less frightening were the various sorts of personal health issues soldiers had to deal with on a daily basis. Poor diet and inadequate hygiene made diarrhoea a frequent companion on campaign. Inevitably it was difficult for soldiers in the field to follow the sensible advice of the physicians, such as to abstain from drinking warm beer and from eating raw meat (Papyrus Ebers 207, 855). Soldiers on campaign no doubt ate with their fingers, like all Egyptians, but were not always able to observe the niceties of washing their hands before and after every meal. This was especially so if water was a premium, the little they had being reserved for drinking and cooking purposes only. Unsurprisingly, then, infectious diarrhoea was common. One treatment calls for 'fresh *djaret*-plant: ½; fresh dough: ½; fat/oil; honey: ½; wax: ½; water: 25 m [one ro is roughly equivalent to a tablespoon]. Cook this and eat for four days [in a row]' (Papyrus Ebers 44). Here mention of the *djaret*-plant refers to the seed of the carob tree, which is still widely used by herbalists today in treating diarrhoea.

Chances of survival

From Diodoros (1.82) we know that army physicians were charged with alleviating the sufferings of soldiers to the very best of their abilities and that, since they were paid (in kind) from state funds, medical care was given to them free of charge. Yet survival rates were probably dismal as the physicians, undoubtedly too few in numbers, would be too overwhelmed in the first critical hours after a battle to attempt anything more complicated than patching up the wounded.

The battle casualties confronting them would have comprised two general categories, the first being those who had suffered relatively minor flesh wounds, contusions or simple fractures, who could be helped off the battlefield by comrades to be treated and bandaged there and then. The more seriously wounded who lay out on the ground – dead and dying, friend and foe, frequently mingled – would require prompt attention, but the outlook for them was far less hopeful if they could not rise under their own power.

Still, it is worth remembering that many of our peasant soldiers, from their years on the land, would have acquired expertise of plants, poultices and purges, splints, bindings, even rudimentary surgery, all the bucolic-derived veterinary usages a peasant farmer learns seeking to keep his livestock sound and thriving. Thus non-specialists were probably sufficient for the most common injuries such as broken bones and minor puncture wounds, and for the minor illnesses that could be remedied with herbal treatments.

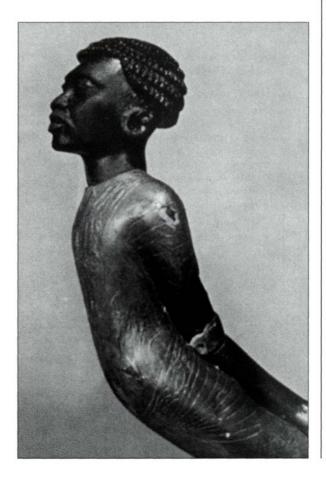
BEYOND THE BORDER

Despite the accomplishment of the Dynasty XII pharaohs in pushing Egypt's political border to Semna on the southern edge of the Second Cataract, Egypt in fact terminated at the First Cataract. Here the

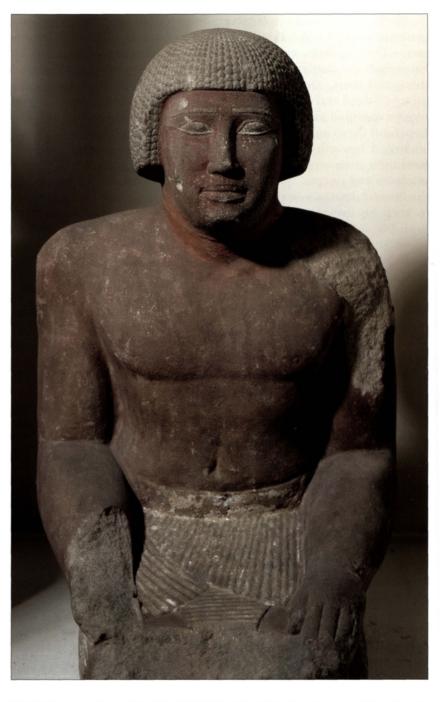
Egyptian language and culture found their most southerly exponents in the communities of Swenet (Aswan) and Elephantine. Few in number and isolated in what is essentially an oasis on the Nile, the inhabitants of the cataract region were regarded as 'country bumpkins' speaking a dialect almost unintelligible in the north. Tradition had it that the noise of the cataract rendered them hard of hearing.

The place name of Swenet ('trade') clearly reflects the commercial nature of the southern frontier, which represented opportunities for profitable economic activities rather than the threat of invasion. Egypt's main interest here was the resources (particularly gold) of the region south of the cataract, and Middle Kingdom foreign policy was modified to ensure access and acquisition. One effective method of acquiring plunder was to mount an armed 'march-about', a pharaonic chevauchée. This was bound to produce booty, if not goods and slaves acquired through trade (if the locals proved sufficiently intimidated), and consequently a successful chevauchée would more than pay for itself. The evidence that has survived suggests that such expeditions could be mounted on a grand scale. The annals for regnal year 13 of Sneferu (r. 2613-2589 BC) record in part 'hacking up the land of the Nubians: bringing living captives,

Ceremonial cane (Cairo, Egyptian Museum, JE 61732) of wood, ivory, ebony and faience showing the image of one of Egypt's hereditary enemies. In state inscriptions the Nubians were constantly 'crushed', 'vile', 'craven-hearted' and 'wretched'. In reality, albeit a 'soft target', they proved troublesome on numerous occasions. (Esther Carré)



Painted sandstone figure (Cairo, Eyptian Museum, JE 89858 + 91169) of the early Dynasty XII Theban prince Intef. Initially he took the title 'supreme chief of Upper Egypt', but later in his reign he conquered the rival cities of Koptos, Dendra and Hierakonpolis, and adopted a royal name. (AKG-images/Adrea Jemolo).



7,000, large and small cattle, 200,000' (G. Steindorff, et al., *Urkunden des aegyptischen Altertums*, I 236.10). So the Egyptians, even as early as Dynasty IV, had begun the exploitation of Nubia in earnest.

It was also during this period that a fort and small settlement were established on the island of Elephantine, which sits in the middle of the Nile just north of the First Cataract. To get around the cataract, which could not be navigated by boats, all goods had to be unloaded and carried along the riverbank. The island was the ideal location to protect and control the lucrative trade route into the heart of Africa.



The Nubian front

Aptly defined as the 'corridor to Africa', Nubia served as a crucial trading conduit, channelling the resources of tropical Africa northwards to the civilizations of the Mediterranean and western Asia from at least the fourth millennium BC until the Middle Ages. This traditional view has been challenged by those who argue instead that Nubia was primarily controlled from the south, with periods of Egyptian influence being short interludes compared with the many centuries during which it was essentially an autonomous African civilization.

Whatever the truth of the matter, the area occupied by Nubia is the narrow strip of cultivated land between Aswan and Khartoum, which is punctuated by the six Nile cataracts, a series of rocky areas of rapids marking abrupt geological changes in this middle section of the Nile valley. Although the climate of Nubia is more extreme than that of Egypt, ranging from the dry arid north to the tropical south, the ancient agricultural base of both countries was fairly similar (and still is), being characterized primarily by cereal crops, cattle, sheep and goats. However, though somewhat lush and able to support a large number of livestock, Nubia was not an urban region organized into cities.

In the Old Kingdom the involvement of the Egyptians in Nubia was restricted primarily to trading and mining activities. Just north of the Second Cataract, at the site that was to be occupied by the Middle Kingdom fortress of Buhen, there appears to have been a small walled-settlement containing traces of copper-smelting, indicating that mining was one of the earliest reasons for the Egyptian presence in Nubia. By early Dynasty XII the Egyptians had begun to establish their

Model diorama (Edinburgh, Royal Museum) by R.F. Roussel (1945) showing Senusret III inspecting the Nubian frontier circa 1860 BC. In the background towers the fortress at Semna. Senusret led four punitive campaigns against the Nubians, thus enabling the frontier to be established here at the Semna gorge. (Author's collection)



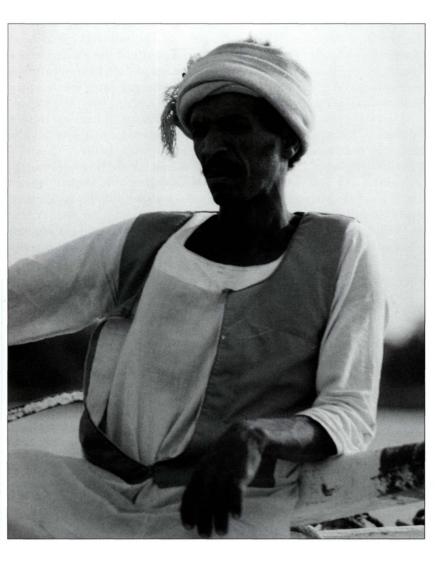
Papyrus bearing the hieratic text of one of the Semna Dispatches (British Museum EA 10752.3). These communiqués from the Nubian fortresses deal with the close surveillance of the frontier region. Nubia, in direct contrast to Egypt, was heavily militarized in the Middle Kingdom.
(© Copyright the Trustees of The British Museum)

chain of fortresses between the First and Second cataracts. The purpose of these military establishments appears to have been to gain a stranglehold on the economic resources of Lower Nubia (Wawat) and the lands farther to the south (Kush), including such important commodities as gold, ivory, ebony, livestock and slaves.

No more fitting memorial can be found to the resolve of Dynasty XII to dominate the territory between the First and Second cataracts than the chain of fortresses erected between Kuban and Semna. Built late in the dynasty, these were sited with a view to taking complete advantage of the defensive possibilities of the terrain, each positioned in order to control the flow of traffic northwards at points where the Nile was difficult to negotiate. Usually located on high spurs or rock close to the west bank of the river or islands within it, the fortresses were surrounded by massive walls of densely packed sun-dried mudbrick - Nile mud was readily available - and equipped with outworks to protect the river approach. Size varied considerably: Semna was only 50 by 60 metres, whereas Buhen attained 1,000 by 130 metres. The number of people who could live on a permanent basis in these confined spaces was probably small, for instance 25 soldiers and their dependants in the case of the fort at Uronarti, but this small number appears to have been sufficient to do the job. (Redford 2004: 29).

There is little doubt that the military resources of the Nubians were second rate compared to those of their bellicose northern neighbours. This salient fact is based upon the relative ease with which the pharaoh's army sailed upstream and met little resistance, if any, on the Nile. Yet the complexity and sophistication of these fortresses is striking, incorporating ingenious architectural devices that would be more readily associated with medieval structural design. Ditches, glacis, berms, towers and arrow-loops, all indicate a concern that can hardly be squared with the threat from a population of semi-nomadic herders less well developed, at least in the military arts, than Middle Kingdom Egypt.

It is tempting to view this fortress architecture as exemplifying the same kind of conspicuous 'energy waste' as the mortuary complexes of the Old Kingdom, a celebration of power and the divine link, wholly divorced from practical need. Alternatively these fortresses could be seen as a means to concentrate military power in the hands of the pharaoh away from the nomes. Senusret III, who was responsible for establishing most of these military installations, significantly curbed the powers of the nomarchs, who not only administered their nome but



Nubian boatman, steering a dhow on the Nile near Kôm Ombo. To the ancient Egyptians the Nubians were the 'Bowpeople', nomads who conducted a type of guerrilla warfare against them. If they were not engaged in conducting raids hither and thither, some Nubians served as auxiliaries in Egypt. (Esther Carré)

also acted as generals of the militia forces raised therein. It was in this second role that a nomarch might be commissioned by the pharaoh to use his militia to undertake certain tasks, such as quarrying or mining expeditions. Likewise, minor military campaigns, as opposed to major national efforts led by the pharaoh himself, could be mounted by a nomarch. For the pharaoh, however, there was always the risk that a strong nomarch could abuse what was effectively a position with a certain degree of independence. This was especially so in times of weak central authority, and Dynasty X, as we know, was established by the nomarchs of Herakleopolis who became kings of northen Egypt. Their main rivals were the nomarchs of Thebes who led the southern nomes against them, and it was the Theban prince Mentuhotep II who fought his way to the kingship of a united Egypt and founded the Middle Kingdom.

The pharaohs of the Old Kingdom had strengthened their position by exalting the instition of kingship through religious means, but this was ultimately not enough to remove the major threat to royal power from the nomarchs. Through a systematic policy of cultural and political centralization the pharaohs of Dynasty XII were to ensure that they commanded sufficient material power, and so by the reign of Senusret III the authority of the nomarchs had been drastically reduced. This was partly as the result of the existence of a royal army in Nubia, where the establishment of the chain of fortesses necessitated the deployment of permanent garrisons of full-time professional soldiers.

Literary evidence suggests that the Nubian fortresses indeed fulfilled a primarily military purpose. Preserved on a late Middle Kingdom document (Papyrus Berlin 10495), their bellicose names – 'Subduer of Nubia' (Semna South), 'Warding off the Bows' (Kumma), 'Repelling the Inu' (Uronarti), and 'Repelling the Medjay' (Serra East), to name but four of the 17 listed – leaves no doubt about their expected function.

Yet the sealing-stones (for storage containers etc.) and inscriptions (bureaucratic documents in the main) retrieved from these fortresses

G: DESERT PATROL

On the Nubian frontier, away from the security of the Nile valley, the real work of a soldier involved minor forays against an enemy that hovers at the limits of Egyptian control, hidden in the deepest recesses of the desert. There are no grand campaigns beyond the thick perimeter walls of the fortress, but hot and dusty treks through potentially dangerous terrain.

Archers are particularly effective for desert patrols where speed and manoeuvrability are of the essence. For patrol work each man carries a quiver, though many Egyptian archers still prefer to carry their arrows loose. Quivers are either crafted from panels of stitched cowhide or woven from plant fibre such as reed. Knotted cords, which are attached to the opening of the case, are used to draw the opening together and thus firmly close the quiver. The quiver itself is designed with a belt that is worn over the shoulder and across the breast. The strap crosses to the opposite side of the body so that an arrow can be easily drawn from beneath the arm.

A leather water skin is shown as being part of each man's personal equipment. The water skin is essential in the arid regions into which patrols are frequently sent. On many occasions, attrition from thirst, fatigue, sickness and distance might be a more serious threat than enemy action.

The patrol is also equipped with dogs that are specifically trained for reconnaissance work. Closely related to what we identify as the greyhound, this tall sleek breed is suitable for tracking. We know from markings on leather collars as well as depictions on stelae that their qualities of faithfulness and pluck were referred to in the names they are given. Thus we know of 'Brave One', 'Reliable' and 'Good Tracker', as well as more down-to-earth names referring to their colour. These dogs are alert for any clue that may disclose the enemy.



tell of a much broader purpose, that is, they served as combined garrison and administration posts. They also provided protection, water and provisions for those passing on legitimate business between Egypt and Nubia while discouraging the uncontrolled migration of Nubians who might otherwise have had free access into Egypt. As we shall see, a set of military dispatches from Semna contains evidence of the close watch kept on the movements of foreigners in the vicinity of the Second Cataract. Hence most fortresses were within signalling distance of each other or would be linked by a series of lookout outposts consisting of a cluster of rough stone huts at strategic high points along the banks of the Nile.

The fortresses were manned by a variety of military and paramilitary personnel, including generals, military officers, rank-and-file Egyptian soldiers, foreign auxiliaries, police and, most commonly, retainers, who constituted the all-purpose bodyguards seen in tomb scenes behind the figure of the tomb owner. Evidence recovered from these sites shows that the storage capacity in terms of grain in each location was sufficient to feed between 300 and 500 people a year. But the number of professional soldiers present on a permanent basis may well have been on average only about 25 or so, and there were many more bureaucrats both resident and passing through. Among the first were a variety of district officers and scribes, labour officials, construction engineers, registration of manpower officials, prospectors, and officials connected with gold production. Obviously, with more functionaries than soldiers housed within their walls, the purpose of these fortresses was defensive in nature, being mainly geared for control rather than attack.

Indeed, many more bureaucrats were to be found in transit, representing every major department of the government, as well as commercial agents for temples. Quarrying expeditions of appreciable size penetrated the hills. In regnal year 4 of Amenemhat II (1919 BC), for instance, a team of 20 chamberlains, 50 lapidaries, 200 stonecutters, 1,006 corvée labourers, and 1,000 pack-asses passed by Toshka in search of stone. Similarly the subsequent Nubian expeditions of Senusret III (1867 BC, 1863 BC, 1859 BC, 1856 BC) involved cutting a canal at the First Cataract to allow boats to pass along the Nile during low waters.

This was a major engineering feat, one which had been started but abandoned in Dynasty VI. The opening of an all-year river passage to Nubia allowed a state flotilla of boats to sail up and down the Nile, touching at every fortress, and a regular service of couriers kept the garrisons in touch with Egypt. One of the most important features in each fortress was a protected stairway giving a direct link with the river, providing both a ready supply of fresh water and also unhindered access. The dynamic Nubian policy of Senusret III meant the southern march was inspected at frequent intervals by a military patrol led by a general or (occasionally) a civil official.

ARMY LIFE

Only professional soldiers (*ahautyu*) remained on active service. Other recruits seem to have held reserve status and were only called up for active duty when necessary. As with most armies, the amount of time an



active service soldier would actually spend fighting was often minimal. Many soldiers would have served beyond the frontiers of Egypt without seeing any action at all. Training and drill would have taken up some of their day, but the bulk of their time would have been spent on other duties. Idleness and boredom can cause unrest, which has always been a potential danger for any army. It is fairly certain, therefore, that soldiers would have been kept busy for all their waking hours. We have already discussed how soldiers were sometimes employed to transport stone, or to escort mining and trading expeditions, which often took large numbers of men to and beyond Egypt's borders. On the other hand, mundane garrison duties, much like those of any army, would have included mounting guard at the grain silos, at the gateways, and on the wall-walk, cleaning and maintaining personal kit, cook house fatigues, and sweeping the camp.

Stele of Ptah (Florence, Museo Archeologico, 6367), a Dynasty XI bowman, and his dog, from Naqāda, Luxor. Groups of men called *nww* are described as patrolling the desert with trained dogs to guard against nomadic incursions. Such teams played a vital role in scouting and reconnaissance. (Author's collection)

Garrison life

Troops in a particular area were called 'garrison of such-and-such a district'. A garrison might include members of a 'town militia' (peasant conscripts) and of the 'crew of the ruler' (full-time professionals), the title of the latter unit reflecting their service in the military flotilla. This royal navy, for want of a better description, after all, was the basic military strength during the Middle Kingdom, directly under the



Dynasty V terracotta model (Florence, Museo Archeologico, 3811) of a woman kneading dough. Dough was kneaded and then formed into flat cakes, usually round but sometimes elongated. These were then baked in a simple oven, usually constructed out of slabs of sun-dried mud. (Esther Carré)

command of the pharaoh and his closest officials, the highest being the vizier. There were also groups of men called *nww*. These appear to have been members of a paramilitary police force as they are described as patrolling the desert with specially trained dogs. Like their dogs, which were breeds closely related to what we identify as the greyhound, these men were clearly full-time professionals. The role of the 'master of the kennels' is known from the fortress at Buhen.

H: DAILY LIFE

Armies, by and large, do most of their tasks outside of the battlefield. They administer, regulate, and, above all, control. In Middle Kingdom Egypt, the army was employed to man the frontier fortresses in Nubia, protecting trade routes and restricting unauthorized movements of the local population. One garrison posting might be Uronarti, a Nile island near Semna.

In garrison

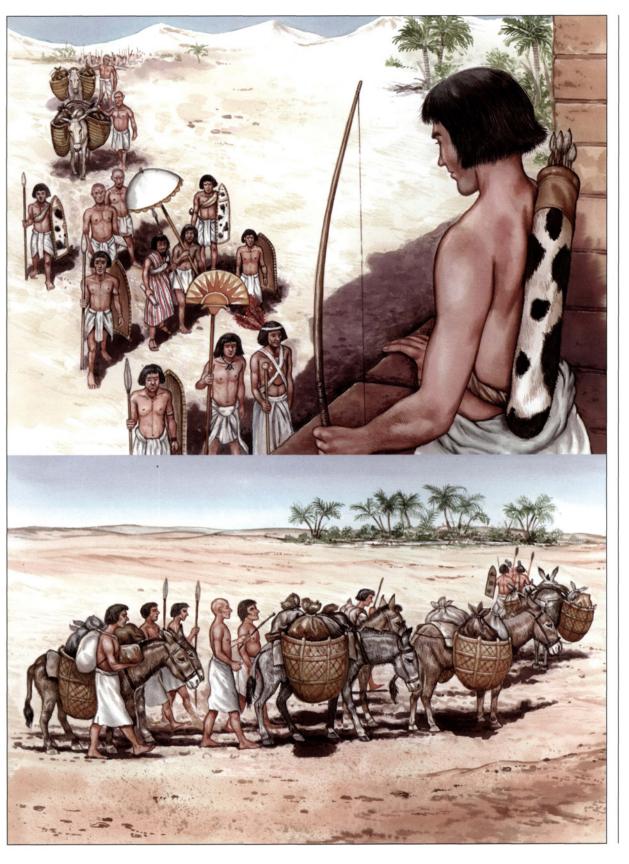
The fortress at Uronarti is protected by a series of sloping, loop-holed walls strengthened with semi-circular bastions. The northern side is more heavily fortified with massive towers. Here the flatter terrain to the north makes attacks from that quarter more dangerous. In addition two longspur walls stretch away from the main defences to the south and north-east, thus providing the whole island with maximum protection.

Triangular in plan, the internal layout of the fortress consists of a grid-plan of specific zones for storerooms, workshops, barracks, officers' houses and a temple. These various quarters are linked and intersected by a network of stone-paved streets. The whole community is encircled by a street around the inside of the rampart, allowing the garrison speedy and convenient access to the battlements. In this scene a bored sentry upon the wall-walk passes time by watching the arrival of a Theban official and his retinue, which includes not only armed retainers but also a sunshade bearer, a standard-bearer and a couple of scribes.

On expedition

The functions of the Middle Kingdom army covered diverse activities such as quarrying, mining and trading expeditions as well as warfare. Military personnel could be found escorting mining expeditions and commercial caravans, which often went beyond the frontiers of Egypt, while the trained manpower of the army was used for civil engineering projects where large numbers of strong, fit men were needed. Soldiers, therefore, were employed on occasion to help with the transportation of large blocks of stone for the grandiose building projects of the pharaohs.

In this scene we see a quarrying expedition making its way to the siltstone quarries of Wadi Hammamat in the eastern desert of Egypt. The soldiers have a dual role, namely to guard against the threat of local bedouin bandits and to provide the non-specialist workforce to move the stone. The expedition is traversing, on foot with accompanying pack animals, a well-established desert route dotted with oases.





Detail of Dynasty XII funerary stele (Liverpool, World Museum) showing part of an offering formula. Here we read the section of the prayer written with the bread and beer signs, while below we see a laden offering table including jars of beer and loaves of bread. (Esther Carré)

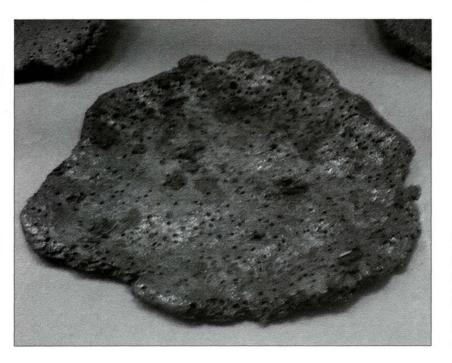
The excavations of the fortresses in Nubia have provided a great deal of explicit evidence concerning the day-to-day maintenance of the garrisons. At Uronarti, for instance, wooden tallies (currently held in the Museum of Fine Arts, Boston) in the shapes of different loaves were issued to at least 25 soldiers of the garrison for use as bread-ration tokens, and the amounts of wheat or barley or number of loaves were carved on them (Kemp 1989: 124-126). Bureaucratic documents often contain details relevant to army administration and rationing, for example saying that the common soldier received 'two jars of water and twenty loaves a day' (quoted in Partridge 2002: 176). An inscription on a quarry wall at the Wadi Hammamat records how the soldiers of Mentuhotep IV were 'equipped with water skins, with bread, beer and every fresh vegetable of the south' (quoted in Partridge 2002: 177). It is clear that at this period the army was well provisioned with the two great staples of Egyptian life, bread and beer, and the individual soldier seems to have fared well when compared with his lot in civilian life, where, according to the Tale of the Eloquent Peasant, his basic wage (paid in kind) was reckoned at 'ten loaves of bread, and two jars of beer daily' (Papyrus Berlin 10499, 3023, 3025 B1 116). Similarly the prayer asking for offerings to be brought to



In Egypt bread was usually made from barley or emmer wheat, which was laboriously ground on the concave upper surface of the quern-stone using another, smaller stone in a rubbing motion, backwards and forwards. The harder the stone, the less grit there would be in the flour. (Author's collection)

the deceased, known as the offering formula and inscribed in Egyptian tombs from the Old Kingdom onwards, usually included a request for 'a thousand of bread, a thousand of beer', or just simply 'bread and beer'.

The Greeks were quite right to call the Egyptians 'bread eaters', for the main staple for most ancient Egyptians was bread. A number of varieties were made from both barley and emmer wheat, the latter being the domesticated form of the wild emmer grass. Even so, the Egyptologist B. J. Kemp has observed that working out the actual bread ration is a tricky affair. He concludes that the daily rations based on the evidence from Uronarti (1 heqat of emmer wheat and % heqat of barley per man every ten days [1 heqat = 4.5 litres, or 4.75 quarts]) led to a surprising result. The daily calorific intake per



Egyptian bread (Paris, musée du Louvre, E 14673) in the form of a flat cake. Stone-ground flour inevitably contained fragments of stone and sand grains, as is evident here. Over a period of time this wore down the enamel of teeth, causing at best discomfort and pain. (Esther Carré)

man came to around 1,448 calories, a figure considerably short of the expected 3,250 calories or so necessary to sustain a soldier in combat conditions (Spalinger 2005: 44–45 n. 12).

Within garrisons the raw ingredients were readily available and the bread was cooked fresh as required. Dough was kneaded and formed into loaves and placed in an oven constructed from three or four slabs of sundried mud from the nearby Nile, on top of which lay another, wider slab. Analysis of loaves found in burial chambers has revealed that Egyptian bread contained substantial traces of abrasive minerals (sand, feldspar, mica, sandstone), introduced either into the flour, as it was laboriously ground on an arrangement of stones known as a saddle quern, a hand-mill shaped as its name indicates like a saddle, or by wind-blown sand and dust. Over a period of time this grit wore down the enamel of teeth, causing at best some discomfort and pain, and at worst, serious abscesses and infections, which could prove fatal.

Presumably soldiers on garrison duty also received a daily ration of vegetables, fruit, fish, fowl, beer and oil. For most of the time the food enjoyed by a soldier was no different to that of his civilian counterpart and even the poorest people in ancient Egypt seem to have subsisted on bread, beer and a few vegetables, notably radishes and onions. According to Herodotos (2.124), a noted visitor to Egypt in about 450 BC, it was with these very commodities that the builders of the Great Pyramids were paid.

Wooden model (Paris, musée du Louvre, E 27164), circa 2000 BC, showing men grinding grain next to a brewer. An important part of the Egyptian diet, beer would be prepared in the household. Though the brew was not necessarily very alcoholic, it did have a high nutritional value. (AKG-images)





Food remains from domestic contexts indicate that beans, radishes, leeks, onions, garlic, lettuces and cucumber were among the most regular supplies of vegetables, but raw fish, either salted or sun-dried, also constituted an important element of the diet of the peasantry. Likewise, various fruits, such as dates, figs, grapes and pomegranates, were available to the population at large. Evidence from the Middle Kingdom pyramidtown of Kahun (el-lahun) shows that pigs were raised for their meat, while hares, gazelle and other wild animals would have provided a supplement to the diet of the poorer populace.

Apart from water, beer was the main drink for all Egyptians, civilian and soldier alike, and was brewed from barley or emmer wheat. The brewing process was short and went hand-in-hand with the baking of bread, and the final product seems to have been a thick, soupy liquid, which, although not always strongly alcoholic, was highly nutritious. The Egyptians began their brewing process, which was done in the household (or by brewers if the beer was for use in rations of state employees such as building labourers and soldiers) with the preparation of partially baked cakes of barley bread. These were placed on a screen over a vat or jar, and water was poured over them until they dissolved and drained into the vessel, whereupon the resultant mixture was left in a warm place to ferment. Often a variety of flavourings were added to the brew, including dates, honey and spices. The sugar from dates or honey would also have speeded up the fermentation. Honey was obtained from both wild and domesticated bees.

These well-preserved food remains (Edinburgh, Royal Museum) come from Egyptian funerary, religious and domestic contexts. They include bread cakes, honeycomb, dates, grapes, palm nut and pomegranate. Next to these 'edible' items are stone model eggs on a dish shaped like a goose. (Esther Carré)

Border patrols

Pedantic military dispatches from the Nubian front, the Semna Dispatches, offer evidence of the existence of border patrols. These dispatches are a set of hieratic communiqués between fortresses in Nubia, probably sent in the regnal year 3 of Amenemhat III (1853 BC). Since these documents came to rest in a Theban tomb, they presumably record messages sent to the official military headquarters established at Thebes, although no designation is specified in the texts themselves.

The messages deal with the close military surveillance of the regions around the military installations, as in the case of one communication sent from a certain Ameny stationed at the Serra East fortress, some 25 kilometres north of Buhen, to a commander in the Theban administration:

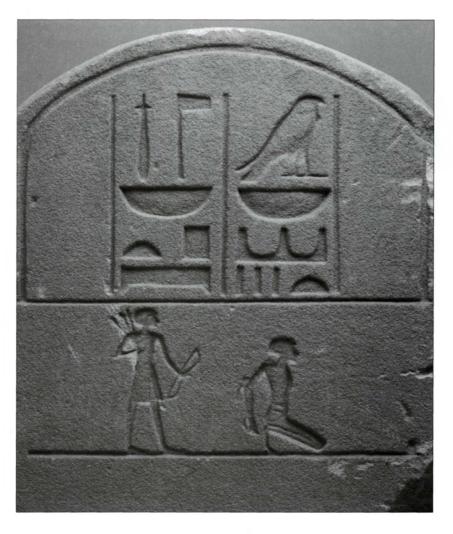
It is a communication to the Master, may he live prosper and be healthy, to the effect that the soldier of Nekhen ... came to report this to your servant at breakfast time on the second day of the fourth month of spring, in the third year, on a mission from the chief of the leaders of the town militia, Khusobek's son Mentuhotep's son, Khusobek ... who is acting in lieu of the leader of the crew of the ruler in the garrison of Meha [a district of Nubia], saying: 'The patrol that went out to patrol the desert-edge near the fortress of Khesef-Medjau [Serra East] on the last day of the third month of spring in the third year has returned to report to me, saying: We have found the track of thirty-two men and three donkeys ...' (British Museum EA 10752.4)

Two principal elements of Middle Kingdom military organization are readily apparent in this letter, namely the transference to the army of the Egyptian bureaucrats' precise attention to detail and the existence of a complex chain of command from overall commander down to common soldier.

The overriding concern of all the dispatches lies in checks on all population movement within the section of the Nile valley in Nubia controlled by the Egyptians. Patrols watched for and reported any tracks left by valley or desert inhabitants of the area (denoted respectively as nhsyw 'Nubians' and $md\Im yw$ 'Medjay'). The area between the First and Second cataracts seems to have been maintained by the Egyptians as a depopulated and militarized zone in the late Middle Kingdom.

Punitive raids

There is no evidence that any of the fortresses in Nubia actually came under attack, and in fact they could have easily have been by-passed in the desert by anyone seriously intent on invading Egypt. If the Nubians had attacked them they would probably have proved nigh on impregnable, but the garrisons seem to have served their purpose as a deterrent and were not put to the ultimate test. I have already mentioned the armed 'march about', and the fortresses would have been used as bases for a short-term *chevauchée* by the Egyptians at times when the permanent garrisons were strengthened by the peasant conscripts belonging to the town militias. These late summer raids were sufficient to subdue any rebelliousness in the area, or at least prove who was in control.



Middle Kingdom–Second
Intermediate Period limestone
stele (Khartoum, Sudan National
Museum), found east of Argin.
The lower register shows an
Egyptian bowman watching over
a bound Nubian. The hieroglyphs
say that he served as a desert
patrolman, and in this capacity
he would have operated along
the Nubian frontier zone.
(AKG-images)

In regnal year 8 of Senusret III (1867 BC) the Egyptian frontier was pushed farther southwards to the Semna gorge some 50 kilometres south of the Second Cataract. The Semna gorge was the narrowest part of the Nile valley, and it was here also, at the final frontier in Dynasty XII, that Senusret built a cluster of four fortresses (south to north: Semna South, Kumma, Semna, Uronarti). Senusret set up a boundary stele that set on record the regulations with regard to border crossings:

Boundary made in regnal year 8 under the Majesty of the King of Upper Egypt and Lower Egypt Kha-kau-re [Senusret], given life forever and ever in order to prevent any Nubian from crossing it on water or land in a k3i-vessel, or any livestock of the Nubians; except for the Nubian who may come to trade in Iken [Mirgissa] on a mission. They are to be treated favourably in every way, but no Nubian k3i-vessel is to be allowed to pass by Heh [Semna] going northwards for ever. (Ägyptischen Museum, Berlin 14753)

Obviously for those who could read Egyptian, the message was clear. Unauthorized incursions by the Nubians would not be tolerated.

Despite this successful campaign and the new fortresses with their permanent garrisons of full-time professional soldiers, relations with the Nubians remained uneasy, and in regnal year 12 (1863 BC) 'his Majesty journeyed to overthrow Kush', and again in regnal year 16 (1859 BC). On each occasion Nubia was plundered. Senusret tells how he 'captured their women ... carried off their subjects, went forth to their wells, smote their bulls ... reaped their grain and set fire thereto'. Regnal year 19 (1856 BC) saw yet another campaign to 'overthrow the wretched Kush' (Ägyptischen Museum, Berlin 14753).

The 'wretched' Nubians probably conducted guerrilla-type warfare against the Egyptians, with small hit-and-run raids here and there. Senusret had to lead a total of four punitive raids into Nubia to maintain Egyptian control there, but the chain of manned fortresses and good communications meant he could, and did, react swiftly to any disturbance and punish any resistance. The Egyptian army of this period acted as a deterrent rather than an instrument of conquest, achieving its main success as a policing force rather than a fighting force. It was useful and easy to lead a raiding expedition south, find a few uncooperative Nubians to kill, a settlement or two to plunder, then to return to Egypt with tales of glory and piles of booty. For, as we have seen, not only were these fortresses garrisons for troops, but they also served as major trading posts and storage depots for the acquisition and importation of luxury goods into Egypt via Nubia.

Military action in Nubia, therefore, was limited to dealing with those Nubians who tried to interfere with the mining of precious metals and stones, and to ensure that trade flowed unhindered.

RELIGIOUS BELIEFS AND WAR

In predynastic Egypt, the rituals of war, that is, the magic and taboos needed to accomplish certain objectives such as secure victory, make your warriors invulnerable, curse the enemy, and so on, assume a theocratic function. The tribal chieftain was a deputy of the gods, and all warfare had to be explained as an act of the gods, fought for their honour and glory and the honour and glory of their mortal champion. The arrival of the pharaohs did not have much effect on the ideology of war. The rituals of war became more costly and ferocious, and the gods and their myths were more clearly defined by organized temple priesthoods. But all aspects of warfare, even as an instrument of state policy, were still interpreted in terms of theocratic kingly militarism. The motives for war are still revenge and prestige. The difference is that wars are now fought to avenge wrongs against the pharaoh and for the honour and glory of the pharaoh (Dawson 1996: 40–42).

Whilst the pharaoh, who was both the quasi-divine benefactor of humankind and the physical incarnation of bellicosity, and his appointed priests, could talk directly to the gods and invoke their help in times of conflict, it is not known how Egyptian soldiers approached religion when on campaign. The population at large regarded religion primarily as a method of averting disaster or harm on a more personal level. Perhaps soldiers, therefore, had their own favoured household gods, maybe the local deities of their hometowns, or perhaps they were content to leave such matters to the pharaoh and the priests.

Amulets

However, it was common for soldiers and sailors to wear small prophylactic charms. Many amulets were shaped like living creatures, or parts of them, in the belief that the wearer could assimilate their desirable characteristics. Catfish amulets, for instance, were everyday pieces of Middle Kingdom jewellery, and were worn from a braided plait of hair. They were perhaps amulets against drowning, suitable for those who regularly travelled the Nile. An amulet's symbolism and purpose were associated not only with its shape but also with the material from which it was made. They could be made

which it was made. They could be made from stone, metal, glass or, more commonly, faience, and the materials (and their colours) were selected for their supposed magical properties. The Egyptians called these items *meket* or *nehet*, all words deriving from verbs meaning 'to protect', although the term *wedja*, 'well being', was also used.

Although we have no artistic evidence to show the use of amulets among Egyptian soldiers, seashells were found attached to the bracers of the archers of Mentuhotep II. The use of shells by these Nubian warriors can be compared with practices adopted by Sudanese tribesmen who still wear shells as protective charms.

There are also numerous surviving scenes showing Egyptian soldiers wearing double feathers in their hair. Although this custom was not unique amongst archers, the feather had an obvious connection to bowmen, and there is some literary evidence to suggest the feather was used as an amulet. For instance, in the Edwin Smith Papyrus, dating to around 1600 BC but very probably also a copy of an earlier Old Kingdom papyrus, there are references to the protective forces that the feather could procure: 'Speak the word over the vulture feather, with which a man has covered himself, placed as his protection in every place he goes. It is a protection against the year expelling sickness in the year of the pest.' (Papyrus Edwin Smith 4).

The work of vultures, picking as they do the abandoned bodies of fallen soldiers, highlights the deepest fears of the Egyptians regarding their mortality and physical preservation. The use of the vulture feather was probably intended to serve as an amulet.

Egyptian gods

Amun

The name of Amun probably means the 'hidden one' and he is sometimes described as the god of the wind. This said, Amun is one of the most important gods in the Egyptian pantheon and his principal temple was at Karnak. He is usually represented as a human figure wearing a crown with two tall plumes attached, sometimes with a ram's head. He was worshipped initially as the state god of Thebes, but with the ascendancy of the early Theban Dynasty XI Amun rose to a position of pre-eminence nationally.

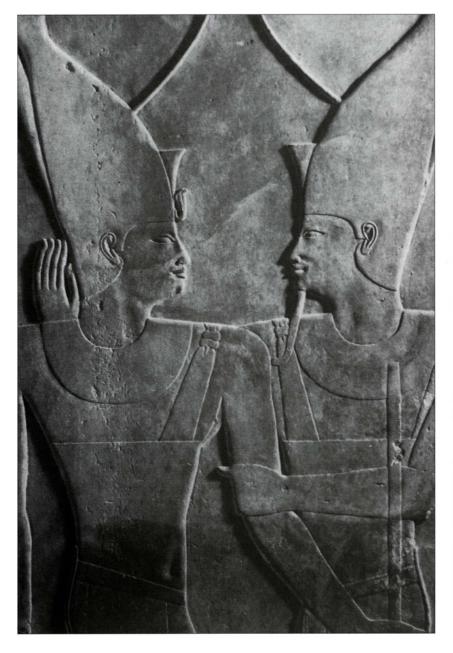


ABOVE Cowrie shell amulets are known as early as predynastic times. In ancient Egypt, as in many African and Asian cultures, the shell's shape was believed to mimic the female genitalia, and symbolically these glossy brightly marked shells of a marine mollusc have been associated with fertility, birth and wealth. (Esther Carré)

BELOW Bone ankh amulet. The ankh is the hieroglyphic sign denoting 'life' and takes the form of a T-shape surmounted by a loop. Temple bas-reliefs often include scenes in which the pharaoh was offered the ankh sign by the gods, thus symbolizing the divine gift of eternal life. (Author's collection)



Bas-relief on a limestone column, Karnak. Atum, creatorgod and solar deity of Heliopolis, welcomes Senusret I (r. 1965–1920 BC) to his temple. The gesture of embrace is caught at the moment the god, having taken the pharaoh by the arm, passes his other hand around the pharaoh's neck. (Esther Carré)



In particular, four rulers of Dynasty XII took the birth name Amenemhat (meaning 'Amun is in the forefront'), and in the jubilee chapel of Senusret I at Karnak he is described as 'the king of the gods'. By this time both Thebes and Amun were intertwined. And so with state, ruler and godhead intimately connected, to fight for Egypt meant to follow the banner of the pharaoh as well as the chief god, Amun.

Amun is often portrayed carrying weapons, with a dagger strapped to his upper arm and a battleaxe tucked into his kilt. He was thought to provide the ruler with victory in battle. The god also commanded the pharaoh to conduct his campaigns, and provided divine protection for him on the battlefield. Much of the spoils of war were then ritually presented to the temple of Amun in the sacred precinct of Karnak.

Bastet

In origin Bastet was a lion-headed warrior goddess from the town of Bubastis (Tell Basta) in the eastern Nile Delta. She is frequently represented holding both the *ankh* sign and a sceptre. Later, however, she became a smiling divinity fond of music and dance. At this point she was portrayed as a cat-headed woman often carrying a sistrum and sometimes accompanied by a small group of kittens. The pharaoh, with his double-sided nature of love and fear, is beneficial when connected to the cat-goddess Bastet, or violently aggressive, as we shall see, when linked to the lion-goddess Sekmet

Montu

The personification of the more aggressive aspects of the kingship, Montu was another local god of Thebes, where his cult is first attested. Depicted with the head of a falcon, he is usually represented with a headdress consisting of a sun-disc and two vertical plumes and carrying a bow and a battleaxe. Closely associated with war and the protection of weapons, Montu had a major temple at Karnak. His name is included in the birth names of the early Middle Kingdom rulers, namely the four Dynasty XI pharaohs called Mentuhotep (meaning 'Montu is content') who, when they had successfully reunited Egypt, made Thebes one of the principal cities and cult centres.

Sekmet

The lion goddess of Memphis, the administrative centre of Lower Egypt, Sekmet ('she who is powerful') presents the most ferocious image of war. As the daughter of the sun-god Ra, she is often represented in Egyptian literature as an avenging deity who revels in the slaughter of humans as an instrument of the sun-god's wrath. Thus on the field of battle she takes the form of the fire-breathing eye of Ra, incinerating the pharaoh's enemies and turning their bodies into chaff. In combat the pharaoh associated himself with the 'rage of Sekmet'.

In an ancient legend Sekmet is sent by the gods to destroy mankind and as one of the earliest known vampires, she develops an uncontrollable lust for drinking human blood. The Egyptians often referred to the goddess as the 'Mistress of Fine and Red Linen', a term which may be associated with the blood-drenched clothes of her victims.

Seth

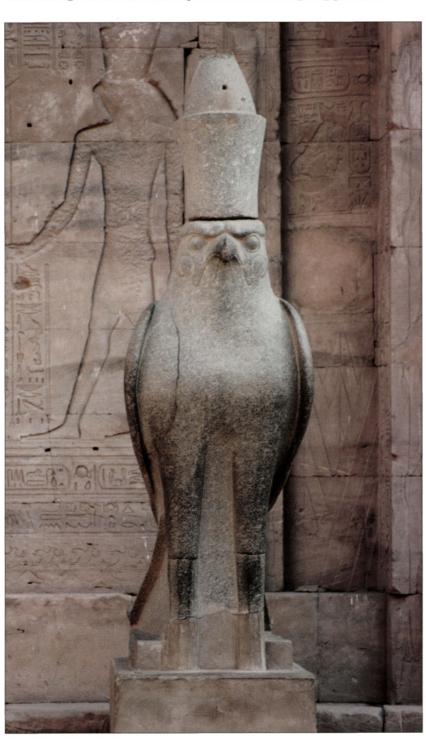
Seth was the god of chaos and confusion, of storms and bad weather. Since the deserts and foreign lands were equated with enmity in the Egyptian world view, the Seth became patron of these areas. He is depicted with the body of a human, red in colour, but with the head of a mysterious dog-like animal, with long, square-tipped ears.

It was Seth who killed his brother Osiris and who engaged in a long and bloody struggle with Horus, son of Osiris, to claim the office of their kinsman. Horus gained the throne, but his conflict with Seth continued, symbolizing the constant battle between good and evil. What followed was a series of events in which the two gods challenged each other in combat. In this duel, Seth put out the eye of Horus, while the latter castrated Seth, part of whose violent nature probably derived from his sexual potency. These elements of aggressive contact, mutilation and sexual humiliation



Bronze statuette (Istanbul, Arkeoloji Müzesi) of Sekmet, 'she who is powerful', the lion-headed goddess of war and the personification of the aggressive aspects of female deities. As the daughter of the sun-god Ra, she is usually depicted wearing a sun-disc headdress. (Author's collection)

have been identified with the methods used by tribal societies when initiating their young men into warriorhood. In the Egyptian context, however, it seems that this titanic clash between the two gods may have served as a metaphor for the role of male sexuality in the cult of the warrior-king. Accordingly it was Horus, the eventual victor, and not Seth who was regarded as the divine protector of the reigning pharaoh.



Granite statue of Horus, Edfu. Horus, whose father Osiris was slain by Seth, is often represented as a falcon-headed man. Here, however, the god is depicted as a falcon, his ba or physical manifestation. The bloody struggle between Horus and Seth symbolizes the constant battle between good and evil. (Esther Carré)

GLOSSARY

Ankh Hieroglyphic denoting 'life', which takes the form of a T-shape

surmounted by a loop.

Autobiography Commemorative funerary inscription, in which the deceased

addresses the passer-by with an idealized description of his/her virtues, as manifested in his/her life and career.

Bedouin Nomadic pastoralists of northern and central Arabia and

Egypt's eastern desert, where their descendants still live today.

Bilge Bottom part of a boat's hull.

Carvel-built Method of boat building in which hull planks are laid flush

edge-to-edge.

Cataracts Rocky areas of rapids in the middle Nile valley, six in number,

caused by abrupt geological changes

Clinker-built Method of boat building in which the lower edge of each hull

plank overlaps the upper edge of the one below it.

Djebet The ancient Egyptian word for sun-dried mud-brick, which

passed, via the Coptic tôbi into Arabic as tub(a), and thence

into Spanish to give the term 'adobe'.

Faience Ceramic material composed of crushed quartz, or quartz sand, with small amounts of lime and plant ash, and usually coated

with small amounts of lime and plant ash, and usually coated with a bright blue or green glaze of soda-lime-silica type.

Hieratic Cursive script used from at least the end of the Early Dynastic

Period (c. 2686 BC) onwards, enabling scribes to write more rapidly on papyri and ostraka, making it the preferred medium

for scribal tuition.

Wall painting from the tomb of Baqt III at Beni Hasan (BH15) depicting a bowman shooting at wild game. In front of him lopes a hunting dog, which looks very much like the breed we know as the greyhound. Such dogs were also used for reconnaissance work. (AKG-images)



Hieroglyphics Script consisting of pictograms, ideograms and phonograms

arranged in horizontal and vertical lines (Greek hierāglyphika, 'sacred carved [letters]'), which was used from the late Gerzean period (c. 3200 BC) to the late fourth century AD.

Projecting piece by which an axe-head is connected to Lug

its haft.

Mastic Aromatic, putty-like resin used as filler, adhesive, or seal.

Nomarch Greek term (nomarchos) used to refer to the governor

of a nome, which the ancient Egyptians themselves called

haty-aa ('hereditary-noble').

Greek term (nomos) used to refer to the 42 traditional Nome

provinces of Egypt (22 in Upper Egypt, 20 in Lower Egypt), which the ancient Egyptians themselves called sepat.

Shell-first Method of boat building in which the hull planking is put in

place before the other strengthening members are fitted.

Sistrum Musical rattling instrument, usually of bronze, played primarily

by women.

Tang Non-business end of a tool or weapon, which is inserted into

a handle or shaft.

Tholepin Wooden pin fixed to the gunwale of a boat to which an oar

is attached by means of a grommet.

Vizier Term usually employed to refer to holders of the Egyptian

> title tjayty sab tjaty, whose position in the ancient Egyptian administration is generally considered to have been roughly

equivalent with that of the vizier (chief minister) of the

Ottoman Empire.

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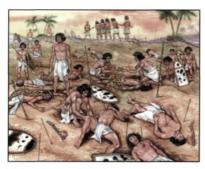
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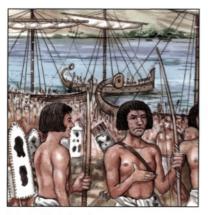


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